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SEPTEMBER 14, 1940

# Railway Age

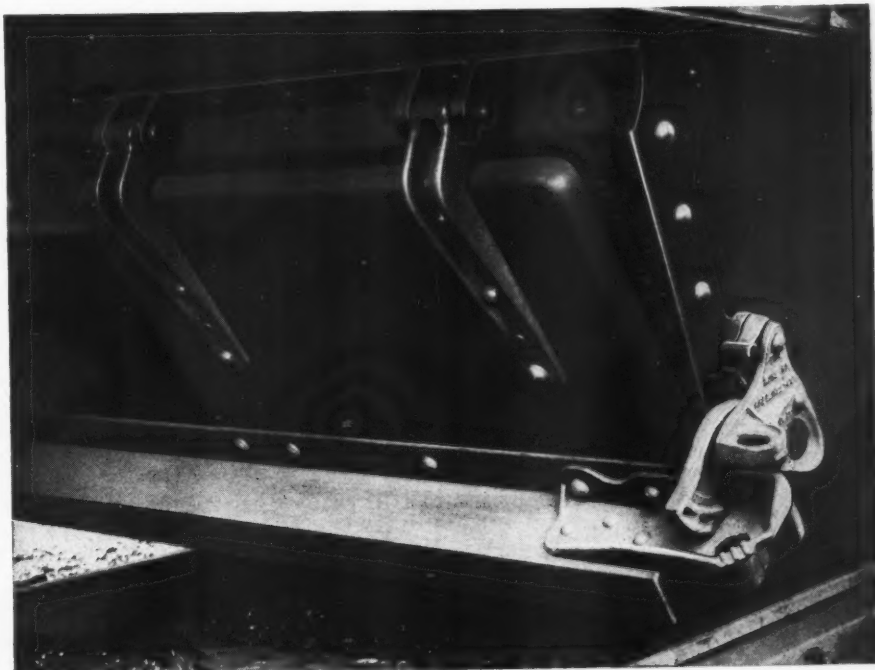
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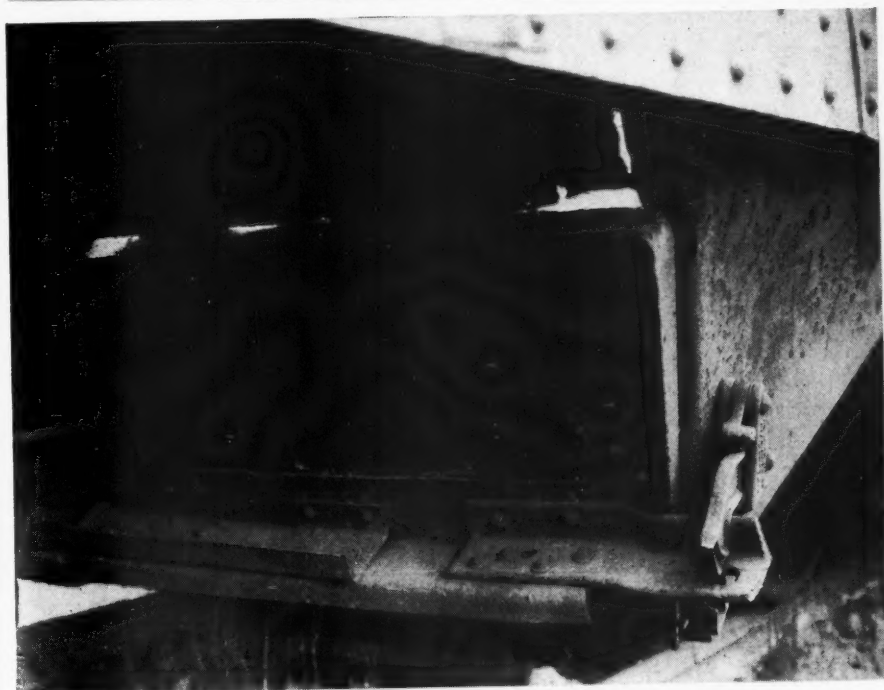
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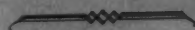
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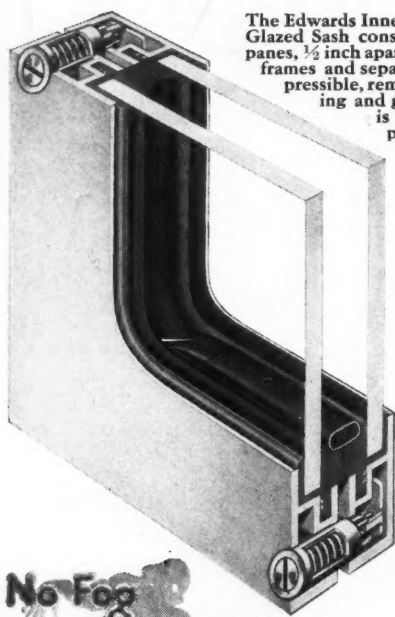
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# Basing Railroad Reorganizations on Permanency of Depression

The Interstate Commerce Commission issued recently a very significant statistical statement. It merely set forth the capitalizations on July 31, 1940, of twenty-five bankrupt railways, and the capitalizations that the Commission's examiners or the Commission itself have proposed the federal courts shall give these railways when they are reorganized; but that was all it had to set forth to call attention to some very important facts.

The combined indebtedness of these railways on July 31, 1940, was 3 billion 708 million dollars, of which 3 billion 100 million dollars was represented by long-term securities. Their annual fixed charges were 131 million 500 thousand dollars. The Commission (or its examiners) has recommended that this total indebtedness be reduced to 1 billion 610 million dollars of long-term debt having annual fixed charges of 39 million 500 thousand dollars. The reduction in total indebtedness would be 57 per cent; the reduction in indebtedness represented by long-term securities 48 per cent; and the reduction in fixed charges 70 per cent. These railways also had outstanding 1 billion 426 million dollars of par value stock and 1,476,000 shares having no par value. The Commission (or its examiners) proposes that after reorganization they shall have 759 million dollars of par value stock and 12 million shares having no par value. The reduction in par value stock would be 47 per cent.

### A "Death Sentence" Policy Toward Stockholders

The figures indicate that the creditors of these railroads, if all reorganizations were made as proposed, would suffer heavy losses; but their losses might prove less than the figures indicate. The reason is, that in many or most proposed reorganizations the creditors would receive not only all the new bonds and other securities representing long-term debt, but also most or all of the new stock. If, therefore, the net earnings of these railroads should become larger than the anticipated net earnings upon which the proposed reorganizations are based, their creditors might actually lose little or nothing, or even profit by the reorganizations. The results to stockholders would be widely

different. In many cases the old stock, both preferred and common, would become a total loss to its owners.

Very plainly, then, these proposed reorganizations, and the facts about them, are matters of great importance and significance. And very naturally the question is raised as to the facts, or assumptions, or both, upon which is based the conclusion that such very great changes in the outstanding securities of these railroads should be made. What, if anything, has happened to them which warrants such changes in their capitalization and fixed charges? When did it happen? Why? Was it inevitable or avoidable? What or who has been responsible? If such changes in the capitalization and fixed charges of these railroads are made, what will be the effects upon their future and that of the railroad industry?

### Depression Seen as Temporary in 1931

As background for this discussion we recall what the Interstate Commerce Commission said in its annual report dated December 1, 1931, under the caption "The Railroad Future." In 1931—the second year of the depression—the railways sought a 15 per cent advance in freight rates. The Commission gave them only a small part of this, and in reviewing the case in its annual report made certain statements that we quote below, giving to some of them the emphasis of black-face type:

"It was made evident in that proceeding that distrust in railroad securities upon the part of investors had reached serious proportions. This distrust is due primarily to the very large reductions in railroad earnings **which have accompanied the economic depression . . .** The distrust which investors harbor . . . has been much accentuated by the rather sudden awakening to the fact that the railroads are now faced by serious competition from other, largely new, and developing means of transportation. . . .

"This presently existing distrust is natural but quite undue. **The most effective remedy will be the economic recovery of the country. When business conditions begin to improve, railroad traffic and earnings will improve in harmony with them, just as they have in the past . . .** While the tide may be slow in turning, there is no more reason for thinking that business will not improve than there was in 1928 for thinking that depressions were a thing of the past . . . **Too much weight ought not to be**



attached, therefore, to the present discouragement of investors. When railroad earnings take a sharp turn upward, as in due time they will, railroad credit will also rise."

The Commission proved to be a poor prophet. In every one of the immediately following eight years excepting 1936 both the "total income" of the railway industry available for fixed charges and its "net income" available for dividends was **smaller** than in 1931. "Total income" in 1931 was 831 million dollars; in the next eight years it averaged only 686 million annually. "Net income" (available for dividends) in 1931 was 135 million dollars; in the next eight years it averaged less than 10 million. But this experience did not convince the Commission it lacked the gift of prophecy. It simply changed it from a prophet of early general and railroad recovery into a prophet of eternal depression—as shown by its recommendations for reorganizations in numerous cases, of which those in the case of the Chicago & North Western are a good example.

In the case of this railroad it made an order on April 2, 1940, recommending that total indebtedness be reduced 49 per cent; that indebtedness represented by long-term securities be reduced 40 per cent; that fixed charges be reduced 80 per cent; and that all the new stock issued be distributed among the owners of long-term debt, thus absolutely wiping out all of existing preferred and common stock amounting to some 181 million dollars. It gave figures showing that in the five years 1926-1930, inclusive, the North Western had total income available for fixed charges averaging 25½ million dollars annually and net income after fixed charges (available for dividends) averaging 11 million 700 thousand dollars annually; but that in the five years 1931-1935, inclusive, total income available for interest averaged only 8 million dollars annually and there was a deficit after fixed charges averaging 9 million dollars annually. On the basis of these and other facts the Commission concluded that "our plan of reorganization should be based on a normal expectancy of income available for fixed charges . . . of not to exceed 14 million 625 thousand dollars"—only a little more than half what the railway actually earned in the five years ending with 1930 and only 70 per cent as much as its average earnings throughout the thirty years ending with 1930. And then the Commission proceeded to recommend reduction of present annual fixed charges from 16½ million to only 3½ million dollars!

#### **Depression Now Disregarded as Factor in R. R. Finance**

In justification of its estimate of future earnings and the reorganization plan based on them the Commission said:

"It is true that the capital stock in this debtor was with good reason once regarded as an investment of great value. Regrettably, the conditions relied upon to continue by these investors when they subscribed for or bought the stock at high prices, do not longer exist. Competing forms of transportation, loss of export trade, and shifts in sources of traffic appear to have brought about a continuing change for the worse, as re-

gards any reasonable expectation of the ability of this property to produce earnings sufficient to support a capitalization in which the present stockholders might be recognized as possessing equities of any value."

The thoughtful reader cannot fail to feel, like a blow in the face, the contrast between the remarks we have quoted from the Commission's annual report for 1931 and the remarks we have just quoted from its report in the North Western case—which are typical of its remarks in other similar cases. In 1931, after two years of depression, the Commission strongly emphasized the importance of the depression's effects on the railways, and predicted speedy recovery of the nation's business, and, consequently, of railroad net earnings in spite of the new competition adversely affecting them. But in 1940, after over eight more years of depression, every one of which excepting 1936 has been worse for the railways than 1931, the Commission emphasizes increased competition and some other causes of the greatly reduced net earnings of the North Western and other bankrupt roads, **and does not even mention the main cause**, viz., continuance of the depression far longer than it anticipated in 1931—and much less does it mention any of the reasons for the depression's unprecedented prolongation. And then, having completely ignored in 1940 what in 1931 it emphasized as the main cause of the decline in railway income, it proceeds to adopt the smaller income that has been made since 1931 as a basis for estimating probable future income, and bases its plans for reorganizations of bankrupt companies upon estimates of probable future income thus arrived at.

#### **Depression Now Accepted as Permanent**

What all this means is quite plain: The Commission held, in effect, in 1931 that the depression would be brief, and not much need be done about railroad income excepting wait for general business recovery. The Commission holds, in effect, in 1940, nine years later, that economic conditions worse than it considered abnormally bad in 1931 have now become permanent and therefore normal; that railroad income made under these conditions since 1931 consequently has become normal; and therefore nothing can or should be done about railroads which since 1931 have had income smaller than the Commission then considered normal excepting ignore the continuance of the depression, ignore the reasons for its continuance and reduce the capitalizations of these railways to correspond with their post-1931 income.

**Well, was the Commission right in 1931, or is it right in 1940?** The record conclusively proves that in 1931 it was at least right in attributing the decline in railroad income that had then occurred mainly to the depression. "Total income" in railroad technical accounting parlance is the amount of income available for paying all fixed charges and consists of "net railway operating income" plus "other income"; while "net income" is the amount of income left after paying fixed



charges and which may be spent in making improvements, paying dividends, etc. We give in an accompanying table statistics showing the "total income" and "net income" made by the Class I railways on the average annually in the three periods ending with 1924, and annually in the years from 1925 to 1939, inclusive. We especially call attention to the figures for 1931, because of what the Commission said about the railway situation in that year. "Total income" in that second year of the depression was 48½ per cent less and "net income" 85 per cent less than in 1929; and, as the figures in the table show, both were greatly worse than for periods and individual years as far

Railway "Total Income" and "Net Income"

		"Total Income" available for fixed charges	"Net Income" available for dividends
Annual average, 1911-1914, Inc.	.....	\$964,943,160	\$431,531,774
" " 1915-1919, " "	.....	1,104,603,647	477,888,373
" " 1920-1924, " "	.....	1,107,565,600	445,423,162
Year .....	1925	1,389,218,000	700,831,364
" .....	1926	1,511,019,000	809,054,202
" .....	1927	1,379,184,000	672,899,809
" .....	1928	1,492,875,000	786,823,584
" .....	1929	1,611,444,000	896,806,611
Annual average, 1925-1929, Inc.	.....	1,476,748,000	773,283,114
Year .....	1930	1,227,772,000	523,907,472
" .....	1931	831,224,600	134,761,911
" .....	1932	550,845,690	-139,203,821
" .....	1933	685,305,954	-5,862,836
" .....	1934	665,918,137	-16,887,078
Annual average, 1930-1934, Inc.	.....	792,213,276	99,343,130
Year .....	1935	687,542,924	7,539,127
" .....	1936	851,810,414	164,630,041
" .....	1937	764,801,474	98,057,740
" .....	1938	528,140,237	-123,471,074
" .....	1939	749,598,840	94,638,951
Annual average, 1935-1939, Inc.	.....	716,378,778	48,278,957

back as 1911. The precipitate decline of "total income" and "net income" between 1929 and 1931 could not possibly have been due principally to any cause excepting that to which the Commission attributed it—the depression.

But the Commission also said in 1931, "there is no more reason for thinking that business will not improve than there was in 1928 for thinking that depressions were a thing of the past. . . . When business conditions begin to improve, railroad traffic and earnings will improve in harmony with them." Was the Commission warranted in saying that? According to all the previous experience of this and other industrial countries it was; and the views it expressed were largely vindicated by subsequent experience in other countries and some subsequent experience in this country. The depression continued to grow steadily worse throughout the first two-thirds of 1932; and then there occurred a marked improvement throughout the last one-third of 1932 which had remarkable effects on railroad results. In the first two-thirds of 1932 railway net operating income was considerably less than one-half as large as in the first two-thirds of 1931; but in the last one-third of 1932, owing to the improvement in general business, it was actually larger than in the last one-third of 1931.

The improvement in general business and railroad earnings in this country was interrupted by the bank-

ing crisis in the first quarter of 1933; but it was resumed immediately after the banks were reopened in March.

### Recovery Everywhere Except U. S. and France

In the four months including April, May, June and July, 1933, railroad freight car loadings were 10 per cent larger than in the same months of 1932; and railway net operating income increased from 58 million dollars in these four months in 1932 to 183 million dollars in 1933, or more than 200 per cent. Also, recovery began in every other leading country in the world in the last one-third of 1932 and, excepting in France, continued almost uninterruptedly until the beginning of the present Great War. But in the United States it stopped dead in August, 1933; was not resumed again until midsummer 1935, after which it continued two years; and was then stopped again in the summer of 1937 by the "recession," from which there has not been complete recovery yet.

The effects of this failure of complete recovery ever to be accomplished, of this prolongation of the depression for nine years since the Commission spoke so optimistically in 1931, are written large in the statistics of "total income" and "net income" of the railways given in the accompanying table. In the five years ending with 1929 "total income" averaged 1 billion 500 million dollars and "net income" 773 million dollars annually. In 1931 "total income" was 831 million dollars and "net income" 135 million dollars; in the five years ending with 1934 "total income" averaged only 792 million and "net income" only 99 million annually; while in the five years ending with 1939 "total income" averaged only 716 million and "net income" only 48 million annually. No wonder so many railways with less than average income went under.

But why did not full recovery soon occur, as the Commission anticipated in 1931? Why has not full prosperity ever been restored? Why have railway gross and net earnings, "total income" and "net income" continued on such a low level? The answer is obvious to every student of economics whose opinion is, or ever was, worth a tinker's dam. The New Deal policies of the government of the United States have for seven years prevented the recovery that began in 1932, and again in 1933, and are still preventing it. If the New Deal had not been for seven years forcing upon the railroads and other branches of industry policies recognized by every intelligent and sane economist as inimical to recovery, the Interstate Commerce Commission would not be able to find in the unbrokenly poor railway earnings of these seven years apparent justification for forecasting such earnings as normal in future and recommending that a large part of the securities of railways that have become bankrupt because of these earnings shall be wiped out. And in this connection it is a significant fact which should not be overlooked that of the 25 railroads for which the Com-

mission (or its examiners) has proposed plans of financial reorganization only one of any importance—the St. Louis-San Francisco—was already bankrupt when the New Dealers came to power in March, 1933.

### Why Doesn't I. C. C. Tell the Whole Truth?

The Interstate Commerce Commission is a part of the federal government. All its members now owe reappointment or their original appointments to President Roosevelt. Therefore, it would not be surprising if they should be rather timorous in referring to the direct and indirect effects of policies of the New Deal upon the railways. But by the law which it administers the Commission is charged with the duty of exercising a "fostering guardianship" over the railways. The Commission itself has within the last 20 years specifically authorized issuance of a large part of present railroad securities—including a large part of those that it now recommends shall be wiped out and destroyed. Upon what principle of expediency, equity or even common decency, then, does the Commission believe it is warranted in making recommendations for basing proposed reorganizations of numerous railways upon earnings within recent years and actually **falsifying the record** as to the reasons why these earnings have been so poor? For that is actually what it has done. **In the North Western and numerous other cases it has given every reason excepting the principal one—continuance of the depression—for these poor earnings; and to omit essential facts from a record is to falsify it.** The prolongation of the depression in this country, in the opinion of every reputable economist, has been entirely due to the New Deal policies of the federal government; and when the Commission proposes reorganizations by which there would be wiped out billions of dollars of railroad securities, it is bound by every principle of honor and decency at least to tell what has made this vast destruction of values unavoidable—if, in fact, it has now become unavoidable.

There is much more that might well be said upon this subject. Perhaps we shall say it in future. For example, insurance companies, savings banks and other large creditors of railways are in many cases strongly supporting recommendations of the Commission for completely wiping out the present stockholders. This policy is predicated either upon the assumption that the Commission is right or on the assumption that it is wrong in forecasting railway income in future little or no larger than that of recent years. Those who are assuming the Commission is right, are, of course, assuming that the depression is permanent—a defeatist view of economic ignoramuses, do-nothings and cowards which this paper refuses to accept. On the other hand, those who are backing these proposed reorganizations while assuming the Commission is underestimating future railway earnings are engaging in a kind of capitalistic cannibalism—i. e., are trying to devour the securities of the present owners of equities in the

properties before New Deal policies can be changed and railway net earnings increased.

In any event, the spectacle of New Dealers, the Interstate Commerce Commission, labor leaders and owners of railway bonds combining largely or completely to wipe out the stockholders of numerous large railway systems is a new one, and by no means edifying. It bodes ill for present railway stockholders. It bodes ill for railways that may desire to sell stock in future—for who will be encouraged to buy railway stock issued in future by the destruction of railway stock issued already? And it bodes ill for the entire system of private enterprise in this country; for **private enterprise, if it is to be run at all, must be run by the kind of people who buy stocks, not the kind who buy bonds;** and the more stockholders are dispossessed now in industry as a whole, the fewer people will be disposed in future to become stockholders.

## The Foreman Needs Help

Unlike the railroads, industrial organizations are ordinarily concentrated in one or a few plants, and it is much easier to maintain close and intimate relations between the chief executive and his associates and the supervisors and foremen who come in direct contact with the rank and file. In other words, the railroads have a far more difficult task to maintain the right sort of human relations in their great and sprawling organizations.

There was a time in our industrial history, and it was not so many years ago, when industrial executives began to recognize the importance of giving more attention to the personnel problem, or to the relations between management and men. Special organizations and conferences were set up to consider these matters, and these were largely attended by industrial executives. Then came the time when the chief executive appointed a specialist on his staff, who not only gave all his time to dealing with personnel problems, but in many instances had a number of employees associated with him. Gradually the chief executive passed the greater part of this particular responsibility on to these specialists and he was to be found in small numbers at only a few of the more outstanding industrial personnel relations gatherings, such, for instance, as an international congress.

A significant change seems now to be taking place. A chief executive of one organization, and he is highly regarded in the industrial field, insists that giving generously of his time in contacting and keeping in intimate touch with the foremen in his organization is a paying proposition. He says a reasonable amount of time spent each year in this way pays big dividends by reducing to a much greater extent the amount of his time required for dealing with labor boards, labor lawyers, etc. "How," he asks, "can the foremen who come in



direct contact with the workers, represent the management satisfactorily if they do not come into frequent and close contact with the executives?"

While it is not a new development, it is noteworthy, also, that many industrial organizations are using various means for coaching and training their foremen in the latest and best practices of supervision. Should

not these developments receive careful attention and scrutiny by railroad executives, particularly since their problem in dealing with personnel matters is far more complicated and difficult than that of the average industrial executive? These comments are suggested by a request from a railway officer for information about foremanship training.

## To Compete or Not to Compete?

Over 40 years ago—on April 8, 1900—the following editorial appeared in the Fresno (Calif.) Republican:

"With all this talk about competing railroads that don't compete, and canals that can't be built or wouldn't pay, there seems to be very little realization of the third factor which promises, in due time, to settle the whole question itself without agitation or legislation. Formerly when people groaned over the passenger fares exacted by the Octopus, the only consolation was 'you can get off and walk, if you don't like it.' The advent of the bicycle has made the alternative at least a possible one to vigorous persons with time and sweat to spare; the coming of the automobile and the motor tricycle and bicycle, with the good roads which are sure to follow them, will make the alternative not only possible, but common and pleasant. When that time comes, the era of monopoly in passenger traffic will be gone.

"And why not the same solution for the freight monopoly? A broad, smooth hard road from here to Stockton, or from anywhere to anywhere, would cost less than either a railroad or a canal, and would be open to anybody. The freight automobile, in the form of the traction engine with its trail of trucks, is no distant dream, but a present reality. All it needs is roads and bridges, and such improvements in its own efficiency and economy as would soon follow its common use, and anybody will be able to carry freights anywhere. This will not abolish the railroads, for there will never be any way, except natural watercourses, over which anything can be transported so well and so cheaply as over the railroads. But it will put the railroads on a competitive basis, not merely on long runs, between water terminals, but on every mile of road, and thus force them to reduce their whole business to a business basis. Viva la Automobile!"

The significant sentences in the above far-seeing editorial are not those predicting the triumphant progress of motor transportation, but rather those which foretold the effect of this development on the railroads. It would have been easy for a careless day-dreamer at a time when visions of unbounded "progress" were endemic to have predicted the passing of the railroads. But this prognosticator, either consciously or unconsciously, sensed the inherent technical superiority of railroad transportation over its potential highway and improved-waterway rivals, and he did not make the mistake of predicting that newer forms of transport would supplant the railroads. Instead, he saw correctly what the railroads' real problem would be—that of recasting their service and their policies from a basis of monopoly to one of all-pervasive competition.

It is a difficult change-over, but not one to cause any qualms on the part of those with faith in free enterprise. Despite all the changes which have come since that editorial was written, the railroads

still maintain their economic superiority over their rivals in providing the bulk of the freight transportation service of the country, and their troubles arise largely from the unwillingness of shippers, of legislative and regulatory authorities and even of some railroad men to accept the new competitive era and to quit dealing with the railroads as if they any longer were, in any sense of the word, monopolies.

Persistence in treating the railroads as monopolies is what gave rise to the multiplication of excess transportation facilities in this country. If a fellow can manufacture an article and sell it at a profit for 50 cents, but instead charges \$1—he invites competitors to come in who can break even by offering a substitute article at 75 cents. In such a situation, the fellow charging \$1 can either elect to compete or not. If he does *not* choose to compete, he will either drop his price to 75 cents, or the newcomer may be tempted to raise his price to \$1. The business in either case will be shared by **rivals, not competitors**. The public will be paying a rigged price, just as if there were a single producer, but the rivals will not be enjoying monopoly profits because, the chances are, both of them will have idle facilities and will waste a lot of money on high-pressure salesmanship. The condition is not real competition. It has all the disadvantages of monopoly and none of its advantages.

Real competition in such a situation would call for the producer who can sell at a profit for 50 cents to drop his price enough below the 75-cent producer to put the latter out of the running. **Genuine competition eliminates high-cost producers.** It does not, as some elementary minds in the regulatory realm seem to believe, consist in pegging prices at a point where every shoestring operator can keep his facilities in the trade with the hope of getting a profitable customer every now and then.

Competition has come to stay in the transportation business so long as shippers have the right to operate trucks on the highways and barges on the waterways. There is money to be made in a competitive business, but not by following the pricing practices of monopoly. The strong impetus which present conditions give to shippers to seek substitutes for transportation of any kind is revealed by the fact that the average freight rate in 1939 was 35 per cent higher than in 1915, while the average wholesale price of commodities was only 11 per cent higher. In the many technical substitutes for transportation there are no rigged prices, nor a multitude of excess facilities which the user is forced to pay for.





A Typical 50-Ton Hopper Car of which the B. & L. E. Has Retired Several Thousand Since 1935

## Effect of Lightweight Cars on B. & L. E.

4,000 USS Cor-Ten open-top cars in ore, coal and limestone service reduced car mileage over 15 per cent and tare ton-miles nearly 14 per cent

**I**N 1936 the Bessemer & Lake Erie inaugurated a program of freight-car replacement comprising the retirement of a large number of old 50-ton open-top cars and the installation of new 70-ton and 90-ton cars, the bodies of which were built of USS Cor-Ten steel. In 1935 81.5 per cent of the open-top cars owned were of 50 tons' capacity and 19.5 per cent of 70 and 90 tons' capacity, all of carbon-steel construction. In 1939 the 50-ton cars had been reduced to 53.4 per cent of the inventory, a few of which were of lightweight Cor-Ten steel construction; 46.3 per cent were of 70 and 90 tons' capacity. The lightweight cars of Cor-Ten steel construction in these two capacities constituted 30.2 per cent of the inventory.

In 1935 the average carload of all commodities, except l. c. l., was 53.77 tons per car. In 1939 it had risen to 65.13 tons per car, resulting in a reduction in the number of carloads to handle the year's business of 43,719 as compared with the cars in service in 1935, the year the program of replacement was inaugurated. The total ton-miles of freight cars (tare ton-miles) was reduced over 16 per cent, gross ton-miles over 5¾ per cent, and total freight-car miles nearly 19 per cent.

In the fall of 1934 the Pressed Steel Car Company turned out a lightweight demonstration hopper car in

which Cor-Ten steel had been employed as the principal material of construction and in the side frames and bolsters of which alloy steel had been used to effect further reductions in weight. This car weighed 30,000 lb. and had a load limit, on nominal 50-ton trucks, of 139,000 lb. The first 100 lightweight hopper cars ordered by the B. & L. E., which were delivered in 1935, were of this design, the objective of which was to determine the ultimate minimum thickness of the material of the car body for an open-top car. They were considered as experimental and have been operating entirely on the home line.

As shown in summary in Table I, subsequent lots of open-top cars were acquired in 1936 and 1937. These were of greater nominal and cubic capacity. The sheets and other parts, however, were somewhat heavier than those utilized in the experimental cars. Both the 70- and 90-ton cars are carried on four-wheel trucks, and alloy-steel bolsters were effectively used to keep down weight. These cars are all fitted with empty-and-load AB brakes.

The bodies of the 70-ton and 90-ton lightweight hopper cars are identical in construction. Both have a capacity of 2,775 cu. ft., level full, and 3,119 cu. ft. with a 1-in-2.5 heap.

Table I—Summary of B. & L. E. Program of Old Open-Top Freight-Car Retirements and Lightweight-Car Acquisitions

	1935		1936		1937		1938		1939	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
50-ton cars:										
Carbon-steel	8,362	81.5	6,763	77.4	5,830	59.4	5,715	48.8	5,572	48.2
Cor-Ten steel	...	...	100	1.1	97	1.0	597	5.1	597	5.2
70-ton cars:										
Carbon-steel	841	8.2	841	9.6	840	8.6	840	7.2	839	7.3
Cor-Ten steel	...	...	...	...	1,000	10.2	1,500	12.8	1,500	13.0
90-ton cars:										
Carbon-steel	1,050	10.3	1,048	11.9	1,048	10.6	1,048	9.0	1,048	9.1
Cor-Ten	...	...	...	...	1,000	10.2	2,002	17.1	2,002	17.2
Total all cars	10,253	100.0	8,752	100.0	9,815	100.0	11,702	100.0	11,558	100.0
Total Cor-Ten steel	...	...	100	1.1	2,097	21.4	4,099	35.0	4,099	35.4

One of the Old 70-Ton Hopper Cars of the B. & L. E.



Cars of 50 tons' capacity had long been the standard on the B. & L. E. until 800 hopper cars of 70 tons' capacity of carbon-steel construction were acquired in 1925 and 1928. These were followed in 1931 by 1,050

capacity of the lightweight 70-ton and 90-ton cars over the old carbon-steel cars comes from two sources: first, the increase due to the reduction in weight effected by the use of the Cor-Ten steel bodies and alloy-steel cast-

Table II—Weights and Capacities of B. & L. E. Hopper Cars

Capacity:	Light weight lb.	Capacity, cu. ft. (heaped, 1 in 2.5)	Full load, lb.		Payload, per cent gross load	
			Run-of-mine coal	Ore and limestone	Coal	Ore and limestone
50-ton carbon steel	40,220	2,120	111,940	128,780	73.6	76.2
50-ton Cor-Ten steel	30,500	2,617	138,180	138,500	81.9	82.0
70-ton carbon steel	55,500	2,835	149,690	154,500	73.0	73.5
70-ton Cor-Ten steel	45,500	3,119	164,500	164,500	78.3	78.3
90-ton carbon steel	58,380	2,983	157,500	192,620	73.0	76.7
90-ton Cor-Ten steel	48,660	3,119	164,680	202,340	77.3	80.6

EFFECT OF COR-TEN AND OTHER DESIGN FACTORS ON CARRYING CAPACITIES

	70-ton cars	90-ton cars
Reduced tare weight, lb.	10,000	9,720
Due to use of Cor-Ten steel	7,076	7,076
Due to change in design of castings, piping, wheels, specialties, etc.	2,924	2,644
Increase in coal-carrying capacity, lb.	14,810	7,180
Due to reduced tare weight	10,000	7,180
Due to increased cubic capacity	4,810	7,180
Increase in ore and limestone capacity, lb.	10,000	9,720
Due to reduced tare weight	10,000	9,720
Due to increased cubic capacity	...	...

carbon-steel hopper cars of 90 tons' capacity. Then in 1936 1,000 each of 70-ton and 90-ton hopper cars of the lightweight Cor-Ten steel construction were placed in service and in the succeeding year an additional 500 70-ton cars and 1,000 90-ton cars of these types were placed in service. During these latter years 500 50-ton mill-type gondolas of the lightweight construction were also installed.

As shown in the table, the effect of these purchases is such that there were 1,000 Cor-Ten steel hopper cars of 70 tons' capacity and 1,000 of 90 tons' capacity in service throughout the year 1937 and 1,500 cars of 70 tons' capacity and 2,002 of 90 tons' capacity in service throughout the years 1938-39. In Table II are shown the loading characteristics of the open-top cars operated by the B. & L. E. during the years covered by this study. It will be seen that, unlike the new cars, the old 70-ton and 90-ton cars had different size bodies. The increase in

ings, and, second, the increase in capacity resulting from improvements in the design of the car effecting increased cubic capacity. The principal improvement of the latter kind results from the placing of the body posts inside the sheathing instead of outside, as was the case with the older 70-ton cars.

The economic effect of these changes is not the same for all of the three commodities moved. In the case of coal, which runs from 49 to nearly 53 lb. per cu. ft., the

Table III—Potential Effect of the Lightweight 70-ton and 90-Ton Hopper Cars on Number of Carloads and Tare Tonnage with Coal, Ore and Limestone Lading in Comparison with the Old 70- and 90-Ton Hopper Cars

	70-ton cars		90-ton cars	
	Coal	Ore and limestone	Coal	Ore and limestone
Net tons per car (Cor-Ten)....	82.25	82.25	82.34	101.17
No. carbon-steel cars to carry same load	1.1	1.063	1.045	1.052
Tare weight Cor-Ten car, tons..	22.75	22.75	24.33	24.33
Tare weight of equiv. cap. in carbon-steel cars, tons	30.53	29.50	30.45	30.71
Reduction in tare weight per Cor-Ten car load, tons	7.78	6.75	6.12	6.38

limiting factor in the tonnage which can be loaded is the cubic capacity of the car. In loading iron ores, which weigh, loose, about 150 lb. per cu. ft., and limestone, about 100 lb. per cu. ft., the cubic capacity of the cars

One of the Original 90-Ton Hopper Cars of Carbon-Steel Construction



cannot be fully utilized and the tonnage carried is up to their full axle load limit.

Comparing the two types of 70- and 90-ton cars, it will be seen that the load limit of the old 70-ton cars is 77.25 tons of ore and limestone and 74.84 tons of coal. The old 90-ton cars will move 96.31 tons of ore and only 78.75 tons of coal. The coal and ore capacity of the lightweight 70-ton cars is the same since the cubic capacity of the car is sufficient to permit a full tonnage loading

**Table IV—Total Carloads and Average Tons per Car of Ore, Coal, Limestone, Coke, Miscellaneous and All Commodities Moved During 1937, 1938 and 1939, Compared with the Carloads Required at the 1935 Average Tons Per Car**

Year	Cars	Tonnage	Avg. tons per car	No. cars, basis 1935 avg. tons per car	Additional cars required
<b>ORE</b>					
1935	60,216	4,062,642	67.47	.....	.....
1937	141,888	10,613,576	74.80	157,308	15,420
1938	42,832	3,429,954	80.08	50,837	8,005
1939	90,040	7,202,008	79.99	106,744	16,704
3-yr. total	274,760	21,245,538	77.32	314,889	40,129
<b>COAL</b>					
1935	93,176	4,992,449	53.58	.....	.....
1937	109,231	6,509,773	59.60	121,496	12,265
1938	70,290	4,282,577	60.93	79,929	9,639
1939	87,894	5,573,041	63.41	104,013	16,119
3-yr. total	267,415	16,365,391	61.20	305,438	38,023
<b>LIMESTONE</b>					
1935	18,558	1,059,033	57.07	.....	.....
1937	30,968	2,120,219	68.46	37,151	6,183
1938	12,720	858,853	67.52	15,049	2,329
1939	27,591	1,983,769	71.90	34,760	7,169
3-yr. total	71,279	4,962,841	69.63	86,960	15,681
<b>COKE</b>					
1935	24,038	846,630	35.22	.....	.....
1937	29,012	1,028,284	35.44	29,192	180
1938	19,718	726,115	36.82	20,613	895
1939	22,288	848,441	38.07	24,091	1,803
3-yr. total	71,018	2,602,840	36.65	73,896	2,878
<b>MISCELLANEOUS</b>					
1935	24,638	901,978	36.61	.....	.....
1937	49,413	2,000,156	40.48	54,636	5,223
1938	22,140	862,089	38.94	23,548	1,408
1939	29,467	1,149,211	39.00	31,391	1,924
3-yr. total	101,020	4,011,456	39.71	109,575	8,555
<b>TOTAL ALL COMMODITIES (EXCL. L.C.L.)</b>					
1935	220,626	11,862,732	53.77	.....	.....
1937	360,512	22,272,008	61.78	399,783	39,271
1938	167,700	10,159,588	60.58	189,976	22,276
1939	257,280	16,756,470	65.13	300,999	43,719
3-yr. total	785,492	49,188,066	62.62	890,758	105,266

of coal and there is no increase in the coal-carrying capacity in the lightweight 90-ton car over that of the lightweight 70-ton car. The full axle-load limit of the 90-ton car, however, permits loading 101.17 ton of ore or limestone.

The use of Cor-Ten steel is responsible for a reduction in the tare weight of the 70- and 90-ton cars of 3.54 tons, and the alloy-steel castings and piping and other

changes in design of wheels, specialties, etc., were responsible for a further reduction of 1.46 tons and 1.32 tons in the weights of the two cars, respectively. These weight reductions are potential increases in lading tonnage which can be fully utilized in ore and limestone loading in both cars.

A further increase in coal loading capacity of 2.41 tons is available in the 70-ton car, because of its relatively large cubic capacity when compared with the old 70-ton cars. The total increase of 3.59 tons in the coal-loading capacity of the 90-ton cars, however, leaves the full load of coal in the new 90-ton cars still nearly 14 tons short of the axle-load capacity of the old 90-ton cars. Hence, the additional coal-carrying capacity must be credited entirely to the increased cubic capacity of the new car body.

### Potential Effect of the New Cars

In appraising the effect of these cars in operation on the B. & L. E. during 1937, 1938 and 1939 two factors must be considered. First, there is the reduction in the number of 50-ton cars in service as the number of 70- and 90-ton cars increased, and, second, there is the influence of the light weight and improved design of the new 70- and 90-ton Cor-Ten steel cars.

As shown in Table II a comparison of the loading ratios of the old 50-ton cars and the old 70- and 90-ton cars shows that there is practically no improvement in the pay-load ratio for coal, ore and limestone in the higher-capacity carbon-steel cars. As far as tare tonnage and tare ton-miles are concerned, therefore, there is little need of considering the effect of the change in the capacity of the cars. The potential effect of the new 70- and 90-ton cars will, therefore, be studied in comparison with the old cars of the same capacities.

In Table III is presented a comparison of the coal-ore- and limestone-carrying capacities of the new Cor-Ten steel cars and the old 70- and 90-ton cars. This table indicates that it would require 100 more carloads to handle the same coal tonnage in the old 70-ton cars as could be handled in 1,000 70-ton Cor-Ten cars and 45 more carloads in the old 90-ton cars than are required to handle the tonnage in the new 90-ton Cor-Ten cars. The increases for ore and limestone are, respectively, 63 carloads per 1,000 in the 70-ton cars and 52 carloads per 1,000 in the 90-ton cars.

The greatest reduction in tare weight is also shown in the case of coal loading in the 70-ton cars. To move the same tonnage which can be loaded in the new Cor-Ten cars in the old cars would entail the movement of 7.78 tons more tare weight for each 70-ton Cor-Ten carload of coal; 6.12 tons more tare weight for each 90-ton Cor-Ten car loaded with coal; 6.75 more tons tare weight for the same tonnage of ore and limestone as can be loaded in the 70-ton car, and 6.38 more tare tons for the net tons which can be loaded in the new 90-ton car.

Thus, during the three years 1937, 1938 and 1939 it is estimated that 35,000 loads of coal were moved in the 70-ton Cor-Ten cars. According to the ratios in the



**Lightweight 90-Ton Cor-Ten Steel Hopper Car—This Car Body and That of the New 70-Ton Cars Are the Same**



**Table V—Reduction in Gross Ton-Miles and Car-Miles in 1937, 1938 and 1939, Compared with Handling Net Ton-Miles of These Years in Cars of the 1935 Average Light Weight and Producing the 1935 Average Load**

	Actual 1937	1937, Basis of 1935 avg. car	Actual 1938	1938, Basis of 1935 avg. car	Actual 1939	1939, Basis of 1935 avg. car	Actual 1937-38-39	1937-38-39, Basis of 1935 avg. car
Total g.t.m. (Excl. loco. and tender)	3,690,010,000	3,865,576,823	1,591,822,000	1,657,604,350	2,714,114,000	2,880,561,028	7,995,946,000	8,403,742,201
Total net ton-miles (Rev. and non-rev.)	2,492,202,000	2,492,202,000	1,051,599,000	1,051,599,000	1,863,469,000	1,863,469,000	5,407,270,000	5,407,270,000
Total ton-miles freight cars	1,197,808,000	1,373,374,823	540,223,000	606,005,350	850,645,000	1,017,092,028	2,588,676,000	2,996,472,201
Total loaded car-miles	39,252,000	45,653,087	16,890,000	19,263,583	27,732,000	34,135,721	83,874,000	99,052,391
Total empty car-miles	14,061,000	16,350,291	7,097,000	8,095,575	9,571,000	11,782,655	30,729,000	36,228,521
Total car-miles	53,313,000	62,003,378	23,987,000	27,359,158	37,303,000	45,918,376	114,603,000	135,280,912
Reduction:		Per cent		Per cent		Per cent		Per cent
Total g.t.m. (Excl. loco. and tender)	175,566,823	4.54	65,782,350	3.97	166,447,028	5.78	407,796,201	4.85
Total net ton-miles (Rev. and non-rev.)	...	...	...	...	...	...	...	...
Total ton-miles freight cars	175,566,823	12.78	65,782,350	10.68	166,447,028	16.36	407,796,201	13.61
Total loaded car-miles	6,401,087	14.02	2,373,583	12.32	6,403,721	18.76	15,178,391	15.32
Total empty car-miles	2,289,291	14.00	998,575	12.33	2,211,655	18.77	5,499,521	15.18
Total car-miles	8,690,378	14.02	3,372,158	12.33	8,615,376	18.76	20,677,912	15.29

table, to have moved the same coal tonnage in the old 70-ton cars would have required over 38,500 carloads. The Cor-Ten cars are thus capable of effecting a reduction of about 9 per cent in the number of carloads. Similarly, the potential reduction in ore and limestone carloads, on a total loading of the two commodities during the three years of about 45,800, was over 2,900 cars.

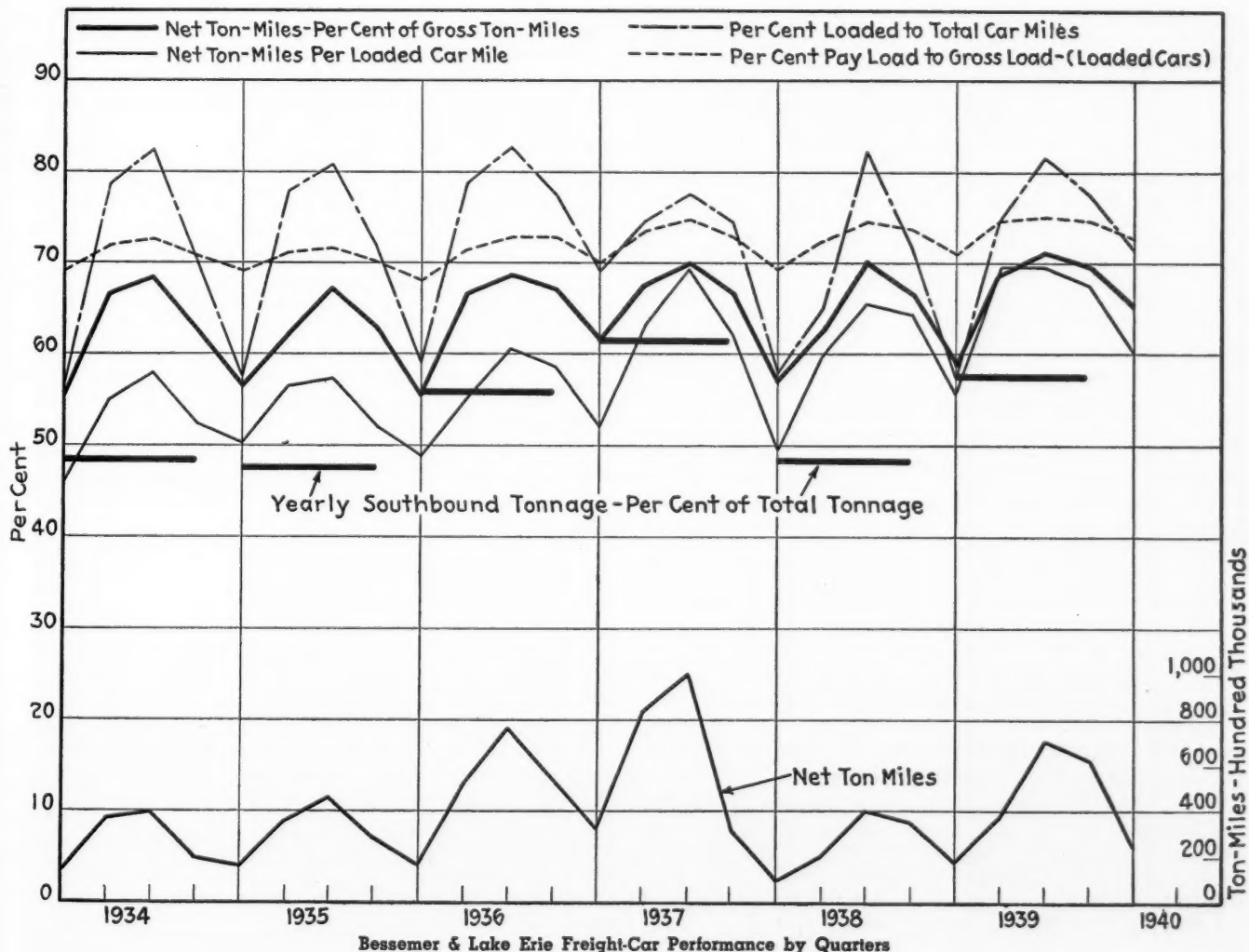
During the same period it is estimated that about 48,100 loads of coal were moved in 90-ton Cor-Ten cars, which would have required nearly 2,200 additional loads if handled in the old 90-ton cars. Similarly, the 58,100 loads of ore and limestone which were moved in the new 90-ton cars during the same three-year period would

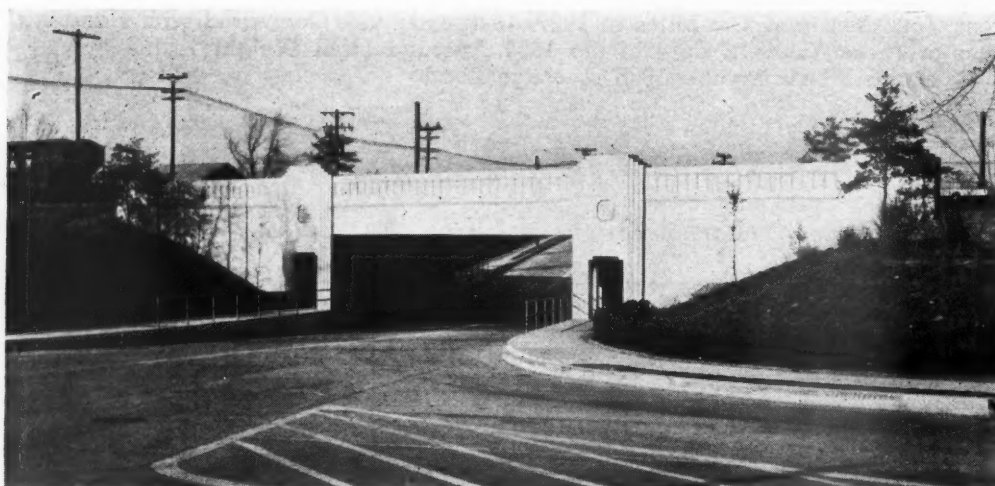
have required about 2,900 more carloads had the old 90-ton cars been employed.

By applying the reduction in tare weight per Cor-Ten car loaded as shown in the table, it will be seen that approximately 80,900 70-ton Cor-Ten carloads of the three commodities effected a potential reduction of about 581,000 tare tons and approximately 106,000 90-ton cars loaded with the three commodities saved a movement of about 665,000 tare tons.

Such is the effect of 1,000 to 1,500 70-ton hopper cars and 1,000 to 2,000 hopper cars of Cor-Ten steel construction on the number of carloads and the amount of tare

(Continued on page 373)





Aside From the Unusual Problems Encountered in Its Construction, the Subway Is Interesting Because of Its Attractive Appearance

## Ground Water Presented Problem At This Street Subway

Difficulties avoided by use of extensive well-point system during construction and unusual subsoil drainage installation for completed structure

**W**HEN the Norfolk & Western recently constructed a street subway at Norfolk, Va., involving the depressing of the street grade a maximum of about 11 ft. below the ground-water table, unusual measures were required for dewatering the subsoil to permit construction to proceed and for handling the ground water on a permanent basis after completion of the project. During the construction work, the water problem was solved with a high degree of success by means of an extensive well-point system, while the permanent measures that were installed include a system of subsoil drains of unusual design, leading to a sump from which the water is removed by automatically-controlled motor-operated pumps.

### Location of Structure

The subway in question was constructed to carry Hampton boulevard at Norfolk under the tracks of the Lambert Point branch of the N. & W., a four-track line extending between Norfolk and the company's tide-water properties at Lambert Point. At this location the tracks extend generally in an east-and-west direction. Originally the railroad line and the boulevard intersected each other at grade, but since they both carry heavy traffic, the highway being the principal connecting thoroughfare between the United States naval base nearby and downtown Norfolk, it was decided to separate the grades.

Owing to the low elevation of the land in the Norfolk area and its proximity to tide water, the ground-water table lies close to the surface of the ground, being at a depth of less than four feet at the Hampton Boulevard intersection. Because of this situation there were obvious difficulties to be overcome in separating the grades by means of an underpass, which were not lessened by the fact that the crossing was located practically at the surface of the natural ground, thereby requiring that a

substantial portion of the necessary headroom for the underpass be obtained by excavation. However, while the engineering problems connected with the construction of a subway were considerable, they were not insurmountable, and this type of construction was chosen in preference to an overpass which would have entailed serious difficulties due to considerations involving abutting property.

### Type of Construction

The structure that was designed for this location is built to carry six tracks and embodies a deck of 36-in. 260-lb. wide-flange beams, spaced 30 in. between centers, spanning between reinforced concrete abutments of the box type, with the wing walls parallel with the tracks. Covering the wide flange beams is a deck of  $\frac{5}{8}$ -in. plates of USS Cor-Ten steel which are welded in position. The structure is placed on a skew of 25 deg. and has a clear span of 41 ft., this space being occupied by a 40-ft. roadway and two 6-in. curbs.

The footings for both the wing walls and the abutments are supported on timber piles. As a means of adding to the stability of the abutments, three reinforced concrete struts, extending between the abutment footings, were placed under the street pavement, one at each end of the subway and the third near the center. Each of the abutments embodies a 5-ft. sidewalk which is raised on a shallow earth fill above the abutment footing to provide space for pipes and conduits underneath. That part of each abutment between the sidewalk and the roadway consists of a line of reinforced concrete columns embodying arched openings. Hand rails consisting of 2-in. wrought-iron pipes are placed in these openings and also extend some distance beyond the ends of the abutments. A concrete fascia girder is provided at each end of the subway.

The minimum head clearance of 14 ft. that was required for the subway was obtained by raising the tracks slightly more than 4 ft. and depressing the street grade a maximum of 15 ft., necessitating the introduction of grades up to 5.5 per cent in the street approaches. In anticipation of the ground-water problem that would be encountered in excavating for the abutment footings and the roadway, the well-point system was installed as one of the first steps in carrying out the project. A total of 159 points were installed, which were arranged roughly in two lines, one on each side of the roadway.

Each point consisted of a 2-in. pipe, 22 ft. in length, embodying a perforated copper screen section, 3 ft. long at the lower end. The points were placed about 5 ft. apart and were sunk to a level about 8 ft. below mean low tide. Six-inch suction lines connecting the tops of the well points extended to a 6-in. motor-operated vacuum pump. This system was operated continuously while the work was in progress and normally discharged water at the rate of about 35,000 gal. in each 24-hr. period. It proved entirely satisfactory as a means of dewatering the subsoil and its use permitted the grading and foundation work to proceed without appreciable delays.

Since the roadway in the subway drops considerably below the original ground-water level, it was necessary, as stated at the outset, to incorporate a permanent dewatering system in the completed structure as a means of preventing hydrostatic pressure on the roadway pavement and other parts of the structure. For this purpose a drainage system was installed under the pavement, consisting of three longitudinal lines of drains, one along each side of the roadway and the other in the center, which discharge into a sump basin located under the pavement at the low point in the roadway.

#### Details of Drains

These drains, which extend 200 ft. each way from the sump basin, are of interest because of their unusual construction. Each drain embodies a 6-in. pipe constructed of porous concrete, which is laid on, and in the center of, a flat concrete slab 3-in. thick and 5 ft. wide. The drain pipes are placed approximately 16 in. below the underside of the pavement and are each surrounded by semi-circular layers of porous materials of different degrees of porosity, each layer being 8-in. thick. The material in the ring or layer adjacent to each pipe consists of coarse gravel, and outside of this material there are layers of fine gravel and coarse sand.

The sump basin into which the drains empty is of reinforced concrete and is 27 ft. by 20 ft. in plan and 4 ft. 11 in. deep. This basin, in which the floor is 6 ft. 3 in. below mean low tide, also serves the purpose of collect-

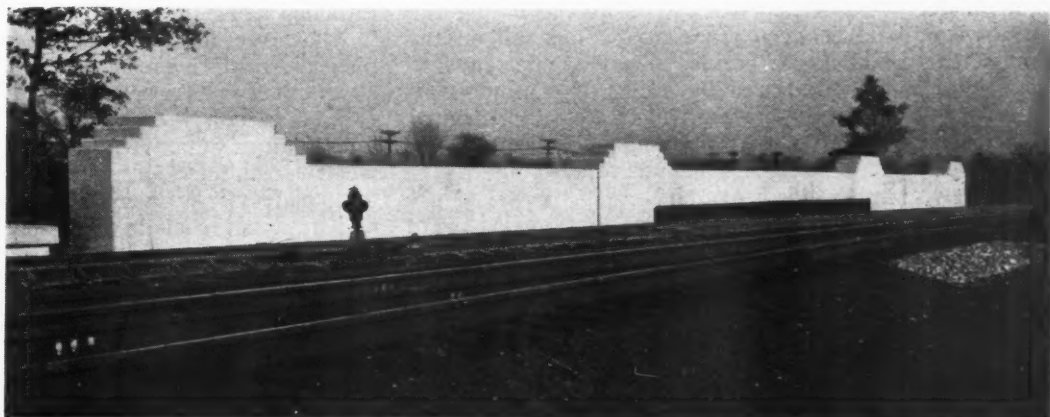


**This View, Taken During the Early Stages of the Project, Illustrates the Effectiveness of the Well-Point System as a Means of Disposing of the Ground Water**

ing all surface storm water that falls in the underpass area. In addition, it receives water from drains placed behind the abutments and wing walls. At the base of each abutment, and extending also along the bases of the wing walls, is placed a line of 8-in. corrugated perforated pipe from which water is drained into the sump by means of an 8-in. cast-iron pipe. The percolation of water into these drains is facilitated by a layer of broken stone that was placed against the rear faces of the abutments and wing walls to a minimum thickness of 2 ft.

Connecting with the sump basin is a 14-in. cast-iron suction line that runs to a pumphouse of reinforced concrete construction that is located at the northwesterly corner of the underpass. This structure contains two motor-operated vertical centrifugal pumps, each having a capacity of 1,200 gal. per min. Automatic control of the pump units is effected by means of float switches located in the sump basin. These controls are so adjusted that one of the pumps cuts in when the water-level in the sump reaches the 3-ft. stage, while the second pump starts operating when the water attains the 4-ft. level. The discharge line from the pump consists of a 12-in. pipe which extends to a connection with the city storm drainage system at a point two blocks north of the subway.

An interesting sidelight on the effects of the temporary and permanent dewatering systems at the subway is provided by the experiences of local residents. Some of these householders formerly complained of wet conditions in the basements of their homes, but since the construction of the subway residents located as far as several blocks from the project have reported that their water troubles have disappeared, thus indicating that the draw-



**View Showing the Track Side of One of the Balustrades. The Dark Strip Is the Side Plate in the Deck**



down in the ground-water table extends over a considerable area.

### Copper Dams for Joints

At all construction and expansion joints in the structure where it was desired to prevent water from seeping through to exposed surfaces, dams were inserted in the joints, consisting, in each case, of a strip of 20-oz. copper placed across the joint and embedded in the concrete. Flat strips, 6-in. wide, were used at construction joints, but at expansion joints 13-in. strips were employed, each of which was formed with a longitudinal fold. Adjoining lengths of the copper strips were soldered together.

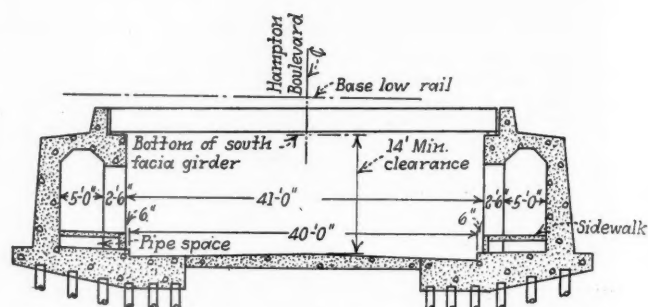
The abutments were each constructed with an expansion joint about midway of their length, and on the rear surfaces of the abutments these joints, as well as the horizontal construction joints, were covered with two-ply fabric membrane waterproofing, 24 in. wide. Elsewhere all concrete surfaces exposed to the earth fill were given two heavy coats of asphalt containing fibre.

In the construction of the subway all railroad traffic was routed over the two northerly tracks and the southerly half of the structure was built first. When this portion had been completed, traffic was routed over it on two tracks, thereby permitting work to proceed on the northerly half of the structure. During the course of the work temporary bulkheads were needed, first for supporting the roadbed under the northerly tracks, and then for retaining the fill under the southerly tracks at each end of the bridge while the northerly portion was under construction. While designed for six tracks, the structure carries only four tracks at the present time.

The deck plates that were applied on this structure

or warping of the plates. After the plates had been fastened down by tack welds, the butt welds were made in three passes, using a  $\frac{5}{32}$ -in. electrode for the first pass and a  $\frac{3}{16}$ -in. rod for the other two passes.

At the ends of the bridge the deck plates extend across

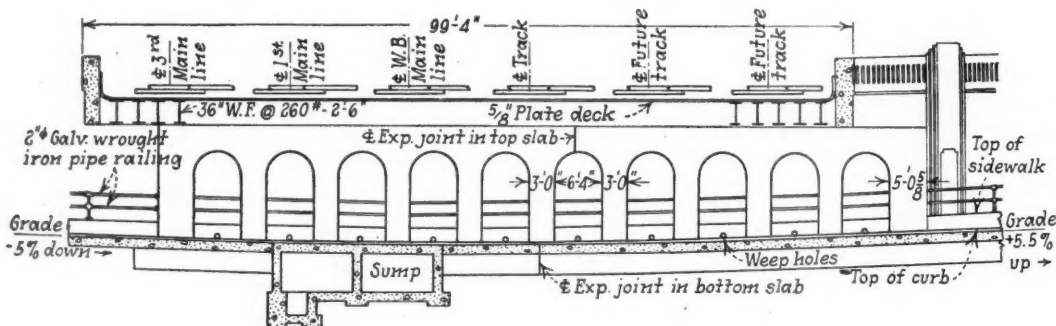


Transverse Section Through the Subway at Right Angles to the Center Line of the Street

the tops of the parapet walls and overhang the rear edges of these walls about 7 in. To the underside of the overhanging portion of the plates at each end of the bridge is riveted a 3-in. by 3-in. by  $\frac{3}{8}$ -in. angle, the outstanding leg of which is flush with the edges of the deck plates.

### Closure Plates at Facia Girders

The closure between the plate deck of the bridge and the facia girder along each side of the structure is effected by a curved plate, involving a right-angle bend. The edge of one leg of this plate is welded to the adjoining



Longitudinal Section Through the Subway Along the Center Line of Hampton Boulevard, Looking Toward Norfolk

were 4 ft. 11 $\frac{3}{4}$  in. wide and approximately 14 ft. long. These plates were laid directly on the wide-flange beams and were placed lengthwise of the bridge, that is, parallel with the tracks, three sections, placed end to end, being required to extend the full length of the structure. One end of each end plate was cut diagonally to conform to the skew angle. The deck plates are so arranged that the lengthwise joints between adjacent sections fall on the center lines of alternate beams. They are fastened to each other and to the beams by means of continuous V butt welds along these joints, which are supplemented by plug welds on 1-ft. 6-in. centers along the center lines of the intermediate beams. The ends of adjoining plates were likewise butt-welded together.

All plate edges that were to be butt-welded were chamfered for their entire thickness to an angle of 30 deg. When the plates had been placed in the final position on the deck, the lower edges of adjacent sections were  $\frac{1}{8}$  in. apart. All butt welds were made by the "back-step" method, this process being chosen to insure an even distribution of heat in the deck plates during the welding work, and thereby to preclude the buckling

plate in the deck, while the other leg lies flat against the inside vertical face of the facia girder, the plate being so dimensioned that its upper edge is about 3 ft. above the tops of the wide-flange beams. Suitable flashing, consisting of an inverted angle partially embedded in the facia girder and fastened thereto with anchor bolts, is provided along the upper edge of each of the side plates.

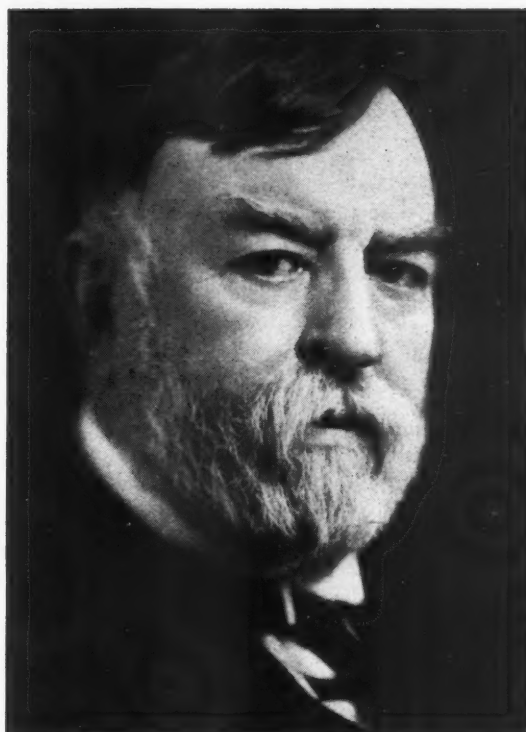
Allowance for temperature movements in the deck plates is made by means of an expansion joint located about midway between the sides of the bridge, where it is in line with the expansion joints in the abutments. This joint is suitably covered by means of a sliding plate welded to the deck plates on one side of the joint. The deck plates were given a shop coat of red lead and oil and a similar coat on the top side in the field. After being welded in place and painted, the plates were mopped on their upper surface with two coats of coal tar pitch applied hot. In addition, they were given two field coats of metal paint on their under sides.

A feature of this subway is its attractive appearance, which is attributable largely to the introduction of pylons,

(Continued on page 373)

# L. F. Loree Dies At Age of 82

Giant of two full railroad  
generations passes after  
two years of retirement



L. F. Loree

**L** EONOR FRESNEL LOREE, one of the great railroad men of all time and one of the most versatile, died at his home "Bowood" in West Orange, N. J., on September 6, at the age of 82, after an illness of several years' duration. Some time before his resignation as president of the Delaware & Hudson on April 1, 1938, Mr. Loree found it necessary to slacken his heavy pace of activity and cast off his many official duties and connections one by one.

His career is one of infinite interest for anybody who cares anything about railroads or about dynamic personalities. He entered railroading in 1877 when the industry was young and its ways as yet ungrooved. From positions of great vantage he watched and experienced the intensification of rate wars and the battle for "empires"; the coming of regulation and governmental interference; wartime federal control; rocket-like wage and cost increases; consolidation efforts and finally depression and intense competition from newer transport agencies. An active man, Mr. Loree plunged into each of these cycles of problems without restraint, chalking up many successes, and not failing to act even when the event was not complete victory for him. A thoughtful

and articulate man—a student and respecter of the past as well as an energetic mover in the present—he saw the basic significance of these successive turns of events and expressed with vigor peculiarly individual opinions thereon.

Mr. Loree (his career was outlined in detail in the *Railway Age* of April 9, 1938, page 659) was markedly versatile. His broad sweep of experience included notable successes in engineering, operation, handling of personnel, regulatory and legal problems, finance and

specific accomplishments consolidation. Among his were the development of the upper quadrant semaphore signal and the lap passing siding; organization of the first railroad police department; installation of the first Mallet locomotive in this country; executive promotion of high-pressure multiple-expansion locomotives and the installation of continuous welded rail, and promulgation and application of original theories on labor-management relations with emphasis on their *mutual interest in increased production*. Beyond these specific contributions, he was one of the most active of all railroad executives in plotting future courses for the industry to meet new conditions—as for example declaring that 30,000 miles

## Increased Production the Road to Well-Being

"There remains the one hopeful way—by increasing production. The possibilities of the future should be at least as great as those of the past. The skill of management may be increased, its field of activity extended, its control strengthened. Capital can be better applied, its accumulation encouraged, its integrity assured. Labor must not waste its productive power, nor limit the maximum use of plant and machinery. Greater encouragement of skill, more facilities for promotion from unskilled work to skilled, better education, together with full opportunity for the use of all intelligence, knowledge and strength, and without insistence on outworn rules as to previous training, will promote the fuller use of the latent abilities of the race. . . . If the rewards of the future are to be increased, the most important task, incumbent upon employers and employees alike, is to increase the national product."

—From Mr. Loree's  
"Railroad Freight Transportation"



of branch and secondary lines should be abandoned; in attacking the growing "dead hand" of government interference, and in the part he played in the consolidation era of the 'Twenties.

The latter two activities deserve amplification. Mr. Loree was one of the first men to foresee that regulatory or administrative bodies of the government inevitably seek more and more power for themselves unless severely checked, not so much because of inherent desire but because successive failures automatically drive them to garner more powers to prop up a crumbling structure. As Mr. Loree said on the occasion of ceremonies attending the D. & H. centennial in 1923: "every successive addition to the regulatory power results in renewed disappointment and this disappointment, exploited by the official body, is easily translated into pressure for still further power. In this way, the failures of regulation become, instead of recognized evidences of error leading to repeal, steps towards more drastic regulation. The end of such a progression is not difficult to foresee; in the case of railway regulation, it is plainly within the range of vision and takes the form of the disaster of government ownership and operation. This calamity, if it comes, will be the price paid for the incapacity of leadership that is apparently unable to find any escape from the grotesque and monstrous futility of adding every year to the superstructure of regulation, although its very foundations have been tested and shown to be unsound and unsafe."

In consolidation enterprise Mr. Loree stands out as the "enfant terrible" of the East who, as president of the moderate-sized D. & H. (which touches no city larger than Albany, N. Y.), nevertheless undertook to upset plans of the so-called four-party conferences in 1925 by laying a fifth eastern trunk line scheme before the Interstate Commerce Commission, while beginning to use the impressive cash resources of the D. & H. to buy important blocks of interest in the constituents-to-be of the low-grade, direct-line railroad he envisioned. The "fifth trunk line" never materialized, due to I. C. C. opposition and the refusal of such roads as the Buffalo, Rochester & Pittsburgh to be Loree-ized, but his investments made money for his railroad. His sale of D. & H. interests in the Lehigh Valley and the Wabash to the Pennsylvania for \$63,000,000 in 1928 is reputed to have brought in about \$22,000,000 more than he paid for the stocks several years previously.

Outside of strictly consolidation activity, but similarly brilliant in execution, was his quiet buying of New York Central stock in the open market until he could announce early in 1933 that the 840-mile D. & H. held over 10 per cent control and the largest single ownership of the 11,000-mile Central. In the southwest, too, where he was chairman of the board of the Kansas City Southern and of the Missouri-Kansas-Texas, Mr. Loree, in company with Daniel Upthegrove of the St. Louis Southwestern, opposed all efforts to parcel out the shorter Southwestern roads to the big transcontinentals and was prevented from combining the former into a strong, solid unit only by the frowns of the Interstate Commerce Commission.

Mr. Loree has been president of three railroads and, as chairman of the executive committee, the dominant interest in another. Ironically enough, he headed his largest road first and his smallest, last, although this peculiar progression signified not a decline but rather a constant increase in the extent of his influence and prestige in the industry. He headed the Baltimore & Ohio from 1901 to 1904, the Chicago, Rock Island & Pacific for nine months in 1904 and 1905 and the Delaware & Hudson from 1907 to his retirement in 1938. In addition he served as chairman of the executive com-

mittee of the Kansas City Southern between 1906 and 1937, and chairman of the board of that road between 1926 and 1937.

In all his activities, this hearty railroad leader displayed a flair for the spectacular and unusual which made him an object of constant attention by newspapermen. Aged just 20 he drew an audience by rebuilding a key bridge of the Pennsylvania over the Raritan river at New Brunswick, N. J., (his college town) in record time. While only a fledgling officer he criticized plans of the chief engineer's office and gained full support for his own ideas. Approaching four score he could make "Wall Street" buzz with gossip and admiration.

Outside of the railroad field, Mr. Loree's exploits were equally legendary. The staff of the Bureau of Railway Economics library still tell the story of his three weeks' stay among them learning the secrets of the librarian and the book buyer so that he could establish a library for his cherished New Jersey College for Women on solid ground. Visitors gaze in admiration at the D. & H. general offices on Albany's waterfront, often mistaking it for the state capitol; its elaborate Flemish architecture is to Mr. Loree's specifications. Best windfall for the popular press was his way of getting home from Europe at the outbreak of the last World War when, stranded in France, he chartered a steamer in his own name and brought home two hundred and fifty-two Americans with him.

L. F. Loree was born in Fulton City, Ill., on April 23, 1858, and was educated at Rutgers University, receiving his B. S. in 1877, his M. S. in 1880, and his C. E. in 1896. He entered railroad service in 1877, as assistant in the engineer corps of the Pennsylvania and served in this capacity until 1879. He then served for two years as a transitman with the engineer corps, U. S. Army, and in 1881 went with the Mexican National Railway as a leveler, transitman, topographer on preliminary survey and location work between the Rio Grande river and Saltillo. In 1883 he was appointed assistant engineer, Chicago division, Pennsylvania lines west; in 1884 he became engineer maintenance of way on various divisions of the same lines, becoming, in 1889, division superintendent of the Cleveland & Pittsburgh division. In 1896, at the age of 38 he was appointed general manager of the Pennsylvania, and in 1901 became fourth vice-president.

In June of that year he was called to the presidency of the Baltimore & Ohio. He left this post four years later to become president of the Rock Island company and chairman of the executive committee of the Chicago, Rock Island & Pacific and the St. Louis-San Francisco, serving in this capacity for nine months.

In 1906 Mr. Loree became chairman of the executive committee of the Kansas City Southern, which post he held until 1937.

The Delaware & Hudson made him its president and president of the Board of Managers in 1907. Between 1926 and 1928 he was chairman of the board of the Missouri-Kansas-Texas. At various times he was a director of the Erie, the National Railways of Mexico, the New York, Ontario & Western, and the Wheeling & Lake Erie.

Mr. Loree was president of the American Railway Association between 1899 and 1901 and in 1913 served as chairman, eastern group, Presidents' Conference Committee on Valuation. He was a member or chairman on several boards co-operating with the government on transport matters during the World War and served on the War Labor Board. He was the American member of the Duff Royal Commission on Railways which exhaustively investigated transportation problems in Canada in 1931 and 1932.



# S. 2009 Passed by Senate

Adoption of revised conference report completes congressional action on omnibus transportation bill

WASHINGTON, D. C.

CONGRESSIONAL action on S. 2009, the omnibus transportation bill, was completed on September 9 when the Senate adopted the revised conference report by a vote of 59 to 15, after refusing by a vote of 51 to 23 to sustain the point of order raised against the report by Senator Clark, Democrat of Missouri. The point of order was based upon a contention that the conferees had exceeded their power in making what they insisted were merely clarifying changes in provisions of the Panama Canal Act which relate to acquisitions by railroads of water carriers other than those operating through the Panama Canal.

The vote on the point of order, which was really a test vote on the conference report, came at 1 p. m. on Monday under a unanimous-consent agreement reached on September 6. The agreement also stipulated that if the point of order were over-ruled the vote on the report would come at 3 p. m.; but, having lost on the point-of-order issue, the bill's opponents did not use the additional time but let the final vote follow along. The bill now goes to the President who may be expected to sign it in view of the fact that it evolved from the recommendations of his committee-of-six; although Mr. Roosevelt's record thus far with respect to committee-of-six recommendations has been his veto of the separately-enacted bridge bill which was nevertheless passed over such veto.

## Wheeler Sees Stabilization of Water Carriers

Following the Senate's favorable action on the conference report, Chairman Wheeler of the Senate committee on interstate commerce issued a statement asserting that "Contrary to views expressed by certain opponents of any form of regulation for water carriers, enactment of this legislation should serve to stabilize water transportation and go far to create a just and equitable competitive situation as between water carriers and other carriers." The Montanan went on to recall how motor carriers had fought the Motor Carrier Act; but none of them are now seeking to have that act repealed.

"The bill," he added, "should not and will not put out of business any water carrier, but specifically protects them from unfair competition on the part of railroads. If the Interstate Commerce Commission should fail to carry out the instructions of the Congress as clearly expressed in this legislation, I would be the first to ask for its repeal, as I am desirous of protecting all forms of transportation against unfair competition at all times."

The 15 Senators who voted against adoption of the conference report were: Bilbo (Miss.), Burke (Nebr.), Caraway (Ark.), Clark (Mo.), Connally (Tex.), Ellender (La.), Gillette (Iowa), Green (R. I.), Miller (Ark.), Overton (La.), Sheppard (Tex.), Democrats; Gibson (Vt.), Hale (Me.), White (Me.), Republicans; and Norris (Nebr.), Independent. All of the foregoing except Green, Hale and White voted to sustain the point of order which was supported also by the following additional Senators who later voted to adopt the conference report: Bailey (N. C.), George (Ga.), Herring (Iowa), McKellar (Tenn.), Pittman (Nev.), Radcliffe (Md.),

Schwollenbach (Wash.), Stewart (Tenn.), Walsh (Mass.), Democrats; and Lodge (Mass.), Taft (Ohio), Republicans.

As noted in the foregoing one of the conference report's opponents (though he voted against the point of order) was Senator White, Republican of Maine. Mr. White was one of the Senate conferees on S. 2009; and he signed the original conference report, although he refused to sign the revised version which came after the original report had been sent back to conference by the House. Explaining his position during the course of September 6's debate on the point of order, Senator White asserted that his unwillingness to sign the conference report and his opposition to its adoption was based "chiefly upon my conviction that title 3 of the bill (the water carrier part) leaves the regulation of water carriers in a more chaotic state than it now is, and my belief that the bill in its provisions with respect to water carriers does injustice to them, and particularly is prejudicial to interests in my own state."

## Legislation Pending Nearly Two Years

Adoption of the conference report by the Senate marked the end of a Congressional fight which has dragged on for almost two years over the bill which Senator Wheeler has often called one of the most controversial measures he has ever encountered. As noted above the legislation grew out of the report of President Roosevelt's committee-of-six which was made public in December, 1938. Early in 1939 bills designed to carry out the committee-of-six program in whole or in part were introduced in both the Senate and House and made the subject of extensive committee hearings. The Senate acted first, passing on May 25, 1939, the so-called Wheeler-Truman bill which undertook to codify the Interstate Commerce Act in accordance with recommendations of committee-of-six counsel. Keeping the Senate number—S.2009—the House struck out all of the Senate bill after the enacting clause, and substituted its own version which rejected codification and took the form of amendments to the present Interstate Commerce Act including a new Part III for the regulation of water carriers.

This uncoded version was passed by the House on July 26, 1939, with the addition of the now-famous Harrington, Wadsworth and Jones amendments. The bill was sent to conference but the conferees did not get down to business until February, 1940. Thereafter they met regularly until mid-April; and the first conference report embodying a compromise bill set up in the House's uncoded form was filed in both branches of Congress on April 26. At that time Conferee Lea, chairman of the House committee on interstate commerce, said that the bill's "most notable purpose is that of taking water transportation into the regulatory system of the country, and unifying regulatory powers under the Interstate Commerce Commission."

Next came the eleventh-hour surprise sprung by the chief executives of the five train-service brotherhoods who joined with the opponents of water-carrier regula-

tion and interests claiming to speak for agriculture in a demand that the conference report be recommitted with instructions to the conferees to restore the Harrington "labor-protection" amendment and the Miller-Wadsworth and Jones rate amendments. The move of the brotherhoods was an unexpected one, because the conferees had what they interpreted as assurances that the controversy over the Harrington amendment had been settled when all of the bill's consolidation provisions had been eliminated.

#### Bill Looked Dead at Time of Recommitment

Nevertheless the House returned the bill to conference, a set-back which was generally interpreted to mean that the measure was dead. However, the European situation and the national defense program kept Congress in session and representatives of railway labor managed to revive the conferees' interest. Thus the revised conference report which restored the consolidation provisions, including a modified version of the Harrington amendment to freeze for a period of four years the jobs of men affected by mergers. Also, the Jones agricultural-rate amendment was restored in modified form but the Miller-Wadsworth amendment was eliminated. The restoration of the consolidation provisions brought back sections of the Panama Canal Act relating to railroad control and acquisition of water carriers—the provisions which gave rise to the points of order made against the report in both the House and Senate. Otherwise the revised conference report was virtually the same as the original one which was reviewed in the *Railway Age* of May 4, page 777; except that the delay caused a change from October 1 to January 1, 1941, in the effective date of the important features of water carrier regulation and from January 1, 1942, to April 1, 1942, in the latest date to which the commission can postpone the effective date. The House adopted the revised conference report on August 12.

Aside from the water-carrier provisions, the most important features of the bill include the declaration of policy, the provisions for appointment by the President of a three-member board to study the relative economy of various agencies of transportation and government aids to transport, the conditional repeal of land-grant rates and the liberalizing amendments to railroad-loan provisions of the Reconstruction Finance Corporation Act. Then there are various amendments to the Part I of the Interstate Commerce Act and the Motor Carrier Act, including in the former connection the aforementioned change in the consolidation provisions which relieves the commission of the duty of making proposed consolidations conform to its general consolidation plan.

Concluding Senate debate on Senator Clark's point of order followed the general lines of the opening discussions reported in last week's issue. Senator Ellender of Louisiana argued at some length on September 5 with Chairman Wheeler, who was assisted from time to time by Conferee Reed, Republican of Kansas, and Conferee Truman, Democrat of Missouri. At one point Senator Reed asserted that "there have been many downright lies by a number of water interests who oppose the whole legislation on the ground that they don't want to be regulated, even though their competitors on the highways and the railroads are regulated." Later the Kansan cited the position of American Trucking Associations in favor of the bill, adding that so far as he knew it was opposed by only "a limited number of water carriers." In obtaining from Senator Reed answers to a couple of questions about the bill, Senator Mead, Democrat of New York, paid this tribute to the Kansan: "I real-

ize that the Senator from Kansas is an expert on the subject matter of this legislation. I wish publicly to express my appreciation to the Senator for the deep and prolonged interest he has taken in this very complex problem. I know that he has worked diligently and consistently in order to bring this legislation to the attention of the Senate."

#### Truman Wants Reorganization Legislation

Conferee Truman closed September 5's debate with a defense of the bill and an argument against the point of order. He did not contend that enactment of S. 2009 would represent a "finished job," but he predicted that it would be a "sound first step" toward the establishment of a national transportation policy. Mr. Truman regretted that the bill does not deal with railroad financial reorganizations; because he saw no prospect for enactment at this session of the Senate-approved reorganization bill now pending before the House committee on judiciary.

Senator Reed had the floor when September 6's debate opened. He defended the action of the conferees, and he and Senator Wheeler answered numerous questions from the floor. In the course of such discussion Senator Wheeler warned that death of S. 2009 would be followed by repeal of the long-and-short-haul clause of the Interstate Commerce Act's fourth section; and in that connection he indicated that he has blocked long-and-short-haul clause repeal thus far.

"If we do not pass this legislation," Mr. Wheeler said, "let me say that what will happen will be a repeal of the fourth section, for such a measure, twice passed the House. . . . The sentiment in the Senate, I happen to know, was for the repeal of the fourth section, because we made a careful check, and a majority of the committee of the Senate was for the repeal of the fourth section. . . . If this bill is killed, then there would be only one thing I could do as chairman of the interstate commerce committee. I would have to say, then, let the railroads be turned loose, let them compete, and let them go ahead without any regulation where they come in competition with water. Then we would see some water carriers howling murder because we were letting the railroads compete with them."

Following this Senator Norris of Nebraska had quite a bit to say in support of the point of order, while Conferee White came along with the aforementioned statement of his reasons for opposing adoption of the conference report. Meanwhile Senator Reed had served notice that if the bill were recommitted he would ask to be relieved from the conference committee; because he would not be a party to bringing in a bill which included anything so "destructive" as the Miller amendment. Later, while Senator Clark was speaking in support of his point of order, Chairman Wheeler served similar notice; like Senator Reed he "would never be a party to writing into the legislation the Miller amendment."

#### Clark Didn't Always Follow the Rule

Senator Connally assisted Senator Clark with suggestions as the Missourian proceeded to make his parliamentary argument; but Senator Wheeler confronted the point-of-order maker with a query as to whether he (Mr. Clark) had "always followed the rule for which he is now arguing." Senator Clark was "frank to say that I have voted on the merits of a measure rather than on the point of order." And thus the debate proceeded through the afternoon of September 6, but a session on Saturday, September 7, was avoided by the



unanimous-consent agreement to vote on the 9th. Meanwhile Senator Shipstead, Farmer Laborite of Minnesota, had made a speech in opposition to the bill.

The closing debate on September 9 brought forth talks against the point of order by Senator Austin, Republican of Vermont, and Majority Leader Barkley. Also, Senators Wheeler and Clark had a few eleventh-hour exchanges. Then came the vote on the point of order. After that Mr. Clark served notice that he would introduce a resolution to repeal the Senate rule which he had relied upon. Talking in opposition to adoption of the conference report, the Missourian told of a conversation which his father, the late Champ Clark, once had with the late James J. Hill. Mr. Clark asked Mr. Hill if the latter's railroad suffered from water transportation. Continuing with his story, Senator Clark said: "Mr. Hill chuckled and said, 'No, water transportation does not bother us at all. We used to have transportation on the Missouri river as high up as Fort Benton; but,' he said, 'by juggling the rates we were able to put most of them out of business, and there are only four or five boats left on the river, and we own them.'"

Following the favorable vote on the adoption of the report, Chairman Wheeler inserted in the Congressional Record a statement explaining certain provisions of the bill. He said it was his desire to have such explanations in the Record, "because I feel they would be helpful to the Interstate Commerce Commission in interpreting the various provisions of the act."

## Effects of Lightweight Cars on B. & L. E.

(Continued from page 365)

tonnage. In Table IV is shown the total actual number of carloads and average tons per car of the ore, coal, limestone, coke and miscellaneous loadings and the carloads of all commodities moved during 1937, 1938 and 1939. These are compared with the average tons per car for the year 1935 in each case. The table also shows the number of cars which would have been required to move the same tonnages during 1937, 1938 and 1939 had the cars in each commodity classification been the same and produced the same average tons per car as those in service in 1935. The projection of the 1935 car situation through the three later years would have required the loading of about 14.5 per cent more cars with ore, 14.2 per cent more cars with coal, and about 22 per cent more cars with limestone. The total increase on all commodities would have been about 13.4 per cent.

In Table V is presented a study of the total gross ton-miles, net ton-miles and car-miles produced in freight service on the B. & L. E. for the years 1937, 1938 and 1939. In each case these figures are compared with those which would have been produced had the same net ton mileage been handled in cars of the average tare weight and average load capacity which prevailed in 1935. For the three years combined the effect was a reduction in gross ton mileage of 4.85 per cent, in tare ton mileage of 13.61 per cent, and in the total car mileage of 15.29 per cent.

These are the results produced by a group of cars of high pay-load to gross-load ratio which during the first year of the period constituted 21.4 per cent of the total inventory of open-top cars and during the last two years of the period represented about 35 per cent. Five hundred ninety-seven of these cars in service during the last year of the period were of 50 tons' capacity, 1,500 of 70 tons' capacity, and 2,002 of 90 tons' capacity.

A further indication of the overall effect of these cars on the car performance of the railroad is set forth in the graph showing trends, by quarters, of the net ton-miles as per cent of gross ton-miles, net ton-miles per loaded car-mile, per cent of loaded to total car-miles, and per cent of pay load to gross load of the loaded cars. The traffic volume is also shown by quarters and the variation in the southbound tonnage, principally ore and limestone, as per cent of total tonnage.

The changing trend in these ratios can best be seen by comparing the third quarters of these years, the quarters in which the peak volume of traffic occurs, and in which the best car performance is shown. The upward trend in the net ton-miles per loaded car-mile stands out sharply after 1936. It is also evident that the clearly defined improvement in the net ton-miles as a per cent of gross ton-miles is more the result of the improvement in the car loading than of any permanent change in the proportion of empty car-miles. This trend follows very closely that of the pay load as per cent of the gross load of the loaded cars.

In addition to the Cor-Ten steel cars covered in this study, orders were placed by the B. & L. E. late in 1939 for 1,500 additional open-top cars of the light-weight construction. With the delivery of these new cars the number of cars of lightweight Cor-Ten steel construction has been brought up to approximately 50 per cent of the total open-top car ownership.

## Ground Water Presented Problem at This Street Subway

(Continued from page 368)

built with bold massive lines, at the portals of the abutments and at the ends of the wing walls. Each of the pylons is approximately 11 ft. wide and is accentuated by a series of setbacks along each side. They project somewhat above other parts of the structure and are level across their upper ends, except that here the vertical lines produced by the setbacks are translated into horizontal steps. Another factor contributing to the attractive appearance of the structure is the deep concrete balustrade that extends between the tops of the pylons. On their exterior faces the balustrades are decorated with rectangular panels formed by recesses cast into the surface of the concrete.

This structure was designed and constructed under the general supervision of W. P. Wiltsee, chief engineer, A. B. Stone, bridge engineer, and W. L. Young, crossing engineer, of the Norfolk & Western. It was financed jointly by the federal government, the railroad and the city of Norfolk. J. Y. Neal, resident engineer at Norfolk, was in direct charge of the work for the railroad. W. N. Jackson, Roanoke, Va., was the general contractor on the project.

THE AUSTRALIAN RAILWAY UNION has recently submitted a demand for an increase in basic wages with the Federal Arbitration Court. Wages of Australian railroad employees consist of a basic rate equal for all occupations, to which are added differentials according to grade and seniority. This basic rate is considered as the minimum required for a reasonable standard of living and is automatically adjusted to changes in living costs on the basis of cost-of-living indices each quarter.

At present, the index figure of 1000 is equated to a basic wage rate of 81 shillings per week; the railway union seeks an increase in the basic rate to 100 shillings per week or a boost of 23.5 per cent. Thus the object of the demand is not to adjust wages to living cost but to raise the basic standard.



# Communications and Books . . .

## Why Not Box Car Advertising?

TO THE EDITOR:

ROSEVILLE, CAL.

It has long been the claim of the American railroads that the only commodity they have for sale is transportation. But is it? It would appear they have overlooked a "sleeper"—i. e., the forgotten chip in a roulette game which is left to ride a winning number; the chips keep piling up around it until its owner wakes up and "cashes in" on it.

The railroads' "sleeper" is the millions of square feet of surface on the sides of their box cars, which could very easily be sold to national advertisers. Within the last few years, a few roads have utilized some of their cars to carry advertising matter calling attention to various "crack" trains, or to the territory

in which they operate. But these efforts bring in no additional revenue, outside of indirect traffic results.

It might perhaps be profitable for the railroads to offer the sides of their box cars for general outside advertising as well. It would not only be adding to their own revenues but may indirectly put the ugly host of billboards throughout the country out of business by making them unnecessary. But whether the advertising is directly concerned with railroad services or whether it is of a general nature it should be pushed vigorously.

W. C. HEILBRON,  
Labor Foreman, Southern Pacific.

## Trucks or Railroads In a National Emergency?

SPOKANE, WASH.

TO THE EDITOR:

*Railway Age*, August 10, contains a communication from S. K. Hawkins of Birmingham, Alabama, entitled: "Railroads Are Ready, Folks Might Think This Over."

Mr. Hawkins, in favorably commenting on the ability of the railroads to handle traffic in event of our involvement in war, speculates as to how many trucks, how much gasoline, and how many men would be required for operation if a Pennsylvania Railroad train of 125 cars, carrying a total lading of 2500 tons, operating over a standard division of 100 miles, were reduced to highway truck transport basis. Mr. Hawkins' remarks were suggestive of the idea that railroad transport was a conservator of man power, fuels, and other energies, primarily necessary in the conduct of military operations.

Mr. Editor, you printed a rather specific answer to Mr. Hawkins' question in your columns January 20 under the title: "A classic freight run." The gist of what I stated in that communication which referred to the performance of a special daily rock train operated by the Chicago, Milwaukee, St. Paul & Pacific, Coast Division, in federal breakwater construction service, was that the train, which had been operating several years, consisted of 70 flat cars, 45 feet long, each carrying an approximate load limit of 125,000 lb. of rock, or a total train lading of approximately 8,750,000 lb., would require 875 highway trucks of 10,000 lb. capacity each, or 805 trucks in excess of 70 railroad flat cars. One operator per truck, or 875 men, would constitute an approximate military regiment; certainly a potentially effective one.

The Milwaukee rock train was operated with five men; conductor, engineer, flagman, fireman and brakeman.

Further considering Mr. Hawkins' reference to a 100-mile division, it is significant that the rock train operated approximately 100 miles from Mulqueen Quarry in the Cascades via several branches to the coastal harbors. A locomotive tender capacity of 16 tons of coal, or less, powered the train. Eight hundred seventy-five highway trucks, carrying the same train load, would require a general average of 10 gallons of gasoline and lubricants per truck per 100 miles, or approximately 8,750 gallons. Although the relative wages of the train crew of 5 men and the 875 truck operators would vary some in various sections of the country, as would the wholesale cost of a ton of coal and a gallon of gasoline and lubricants, it may be that Mr. Hawkins, or other readers, will feel inclined to spend a moment and figure for themselves the relative costs in their particular localities.

The Milwaukee rock train operated via a generally descending grade from the mountain quarry to tidewater; a favorable element and, of course, gradients and other contingent elements respecting both rail and highway operation must be considered in making comparisons. Answering Mr. Hawkins' question relating to the length of the highway truck train, it is pertinent to state that the length of the rock train, including engine and caboose, was approximately 3,250 feet. The length of a highway train

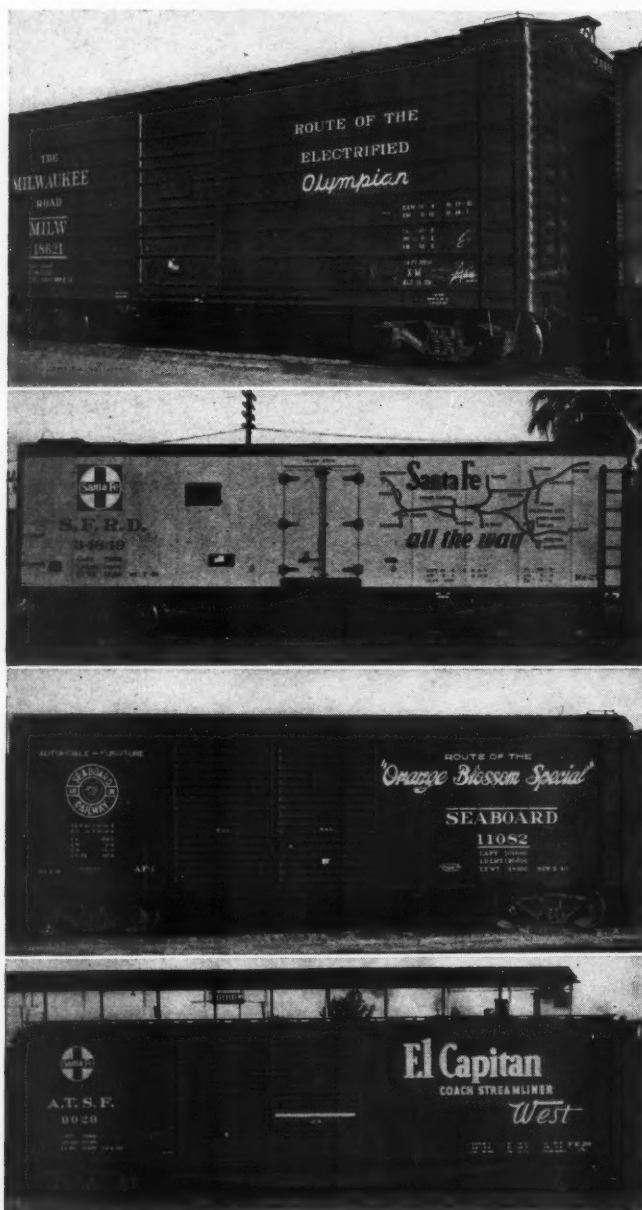


Photo by W. C. Heilbron

Here are Four Illustrations of the Type of Advertising Which Certain Railroads are Beginning to Place on the Hitherto Wasted Space on the Sides of Their Box Cars. A Reader Suggests that These Looming Surfaces Might Also Be Used For Outside Paid Advertising

of 875 trucks, averaging 20 feet per truck, is 17,500 feet; approximately 3.3 miles in length.

Finally, as may be surmised, the highway regiment of 875 men, operating their serpentine truck train, would utilize a paved highway constructed with funds derived, in a considerable measure, from federal and state taxation paid by the railroads which pioneered the country and prepared it for the later competitive truck.

EDWIN SWERGAL

## Novelist Wolfe Liked Trains

WASHINGTON, D. C.

TO THE EDITOR:

I have been much interested in the article appearing on pages 307 and 312 of the *Railway Age* for August 31, written by Mr. Frank Donovan, Jr., dealing with railroad literature as a public relations medium.

Mr. Thomas Wolfe, whose untimely death in 1938 was a great loss to American letters, seems to have been fascinated by the sweep of great trains, particularly as they rushed through the country at night. While Mr. Wolfe has not written any book dealing directly with railroads, yet in almost every chapter of his monumental work, "Of Time and the River," he makes some reference to the impression made upon him as he contemplated these vast expressions of American life and American energy.

I recall that in the opening chapters of what the critics usually consider his masterpiece, he describes a trip which his hero makes, presumably on the Southern Railway, from Asheville to Washington. In his usual poetic and dramatic style, he has given us as fine a picture of American trains as I have ever encountered in literature.

R. V. FLETCHER,

Vice-President and General Counsel  
Association of American Railroads.

## New Books . . .

*Smoke Prevention: Manual of ordinances and requirements in the interest of reduced air pollution, smoke elimination and fuel economy.* 160 pages. 5 in. by 8 in. Bound in paper. Published by the Smoke Prevention Association of America, Inc., 139 N. Clark street, Chicago. Price, 60 cents.

This well-illustrated book contains, in addition to a report of the association's annual meeting, May 21-24, 1940, at St. Louis, Mo., a large amount of specific data describing methods of measuring air pollution, promoting fuel economy, and developing a constructive approach to all phases of the problem of smoke elimination.

The book is of unusual interest to railway officers because of the considerable number of papers on specific railroad subjects that were presented at the May meeting as follows: Methods Employed by the Railroads in Eliminating Smoke, by H. J. Riddle, division road foreman of engines, Pennsylvania, St. Louis, Mo.; Locomotive Smoke Abatement, by William G. Christy, smoke abatement engineer, Hudson County, N. J.; How the Railroads Are Attacking the Smoke Problem, by R. C. White, assistant general manager, Missouri Pacific, St. Louis, Mo.; and Future Outlook for the Prevention of Smoke from Railroad Locomotives, by D. C. Buell, Railway Educational Bureau, Omaha, Neb.

*Proceedings of the American Wood-Preservers' Association for 1940.* 506 pages, 6 in. by 9 in. Illustrated. Bound in cloth. Published by the Association, 1427 Eye street, N. W., Washington, D. C. Price \$6.

Thirty-five papers and committee reports, together with the discussions that followed their presentation, are included in this volume of the proceedings of the thirty-sixth annual convention of the association, which was held in St. Louis, Mo., in January. While some of the papers and reports deal with technical matters relating particularly to the wood-preserving industry, many of

them are of direct interest to railway men. These latter include reports on the fireproofing of timber; on an international termite test; on car lumber; on service records of ties, poles, posts and marine piles; on specifications for the treatment of ties, timber, lumber, piles, posts and poles; and on fireproofing.

Among the papers of special interest to railway men are those on What We Can Expect from Treated Ties, by G. W. Harris, chief engineer, Atchison, Topeka & Santa Fe; on Preframing Treated Timber for Use in Bridges, by G. H. Trout, bridge engineer, Union Pacific; on Stacking, Seasoning and Treatment of Gum Lumber for Railroads, by G. R. Smiley, chief engineer, Louisville & Nashville; and on Still More Diversified Uses of Treated Wood by the Railways, by Elmer T. Howson, vice-president, Simmons-Boardman Publishing Corporation, and western editor, *Railway Age*. Others containing much valuable information with respect to preservatives, treatments and the use of treated timber in related fields, are those on the effect of certain fungi on the strength of southern pine sapwood, by C. Audrey Richards and Mae Spradling Chidester, of the Forest Products Laboratory; on the treatment of lodgepole pine poles, by C. H. Amadon, Bell Telephone Laboratories; and on the effects of steaming on the physical properties of southern pine, by Louis W. Rees, assistant professor, division of forestry, University of Minnesota, and Stanley J. Buckman, research department, American Creosoting Company.

In addition to the foregoing, the volume includes a detailed report of the business sessions of the thirty-sixth convention; a list of all of the wood-preserving plants in the United States, Canada and Mexico; and the thirty-first consecutive annual report, for the year 1939, of the quantities of wood treated and preservatives used in the United States, prepared by R. K. Helphenstine, Jr., of the Forest Service, United States Department of Agriculture.

*The Pressure Boys, The Inside Story of Lobbying in America,* by Kenneth G. Crawford. 308 pages. 9½ in. by 6½ in. Bound in cloth. Published by Julian Messner, Inc., New York. Price, \$3.00.

Here is a book by the Washington correspondent of the New Deal "New York Post" which purports to give the inside story of the pressure groups that are often alleged to, and frequently do, throw monkey wrenches into the processes of democratic government. It contains a lot that is true and a great deal that is misleading. He starts out with the premise that "property" is the big lobbyist and somehow manages to overlook the pressures of government bureaus, city political machines and reformers like himself.

The chapter which will interest railroad men—and make them boil—is entitled "Railroads Unregenerate." Mr. Crawford says the roads maintain the largest lobby operating in Washington and state capitals and quotes alleged sums of money spent. Under the fire of his prejudiced wrath come the state organizations; the Association of American Railroads, the "railroad employees and taxpayers' associations," the Security Owners' Association, the Shippers' Advisory boards, insurance companies, employees' organizations and any other commercial or civic body which ever dared to take the railroads' side on the Fourth Section controversy, waterway projects or highway subsidies.

His most terrifying blows, however, are reserved for Joseph H. Hays, counsel for the Western Association of Railway Executives, for his work in competitive transportation research and for the studies on highways sponsored by the A. A. R. At one point, in discussing an engineering study which showed the effect of heavy trucks on road surface, the author states baldly, without authority, "The truth is that the highway failed—not because of heavy truck traffic—but because the concrete mixture used in its construction was not good."

It is apparently the author's staunch belief that any attempt by railroads to reveal the high cost of subsidized transportation; to oppose further wasteful waterway projects; to disseminate information about the effect of heavy trucks on highways or to protect their enormous property investment from government whimsy is an evil practice, greatly to be condemned. We wonder if he can suggest an alternative. Or perhaps he desires extinction for railroad transportation.



# NEWS

## Classifications To Be Simpler

Consolidated classification to be cut  $\frac{1}{3}$  and maybe  $\frac{1}{2}$ , committee promises

Reduction in the size of the present Consolidated Freight Classification "by at least one-third and probably as much as one-half" is expected to result from the labors of the Classification Simplification Committee which will publish its report "within the next 60 or 90 days", according to answers filed on August 29 by the Southern Classification Committee and the Official Classification Committee in response to some of the questions asked by the Interstate Commerce Commission in connection with its No. 28310 general investigation of the Classification. The Classification Simplification Committee, like the so-called Merchandise Committee which has been working on the I. C. I. rate structure, is a sub-committee of the Association of American Railroads' Traffic Advisory Committee.

Replies to the commission's questions in 28310 were received also from the Western Classification Committee; but the aforementioned statements of the Southern and Official-territory roads went into more detail about the Classification Simplification Committee's work. "The arrangement of the new Classification," they said, "will be different from the present form. There will be more groupings of articles than at present. The items, instead of being arranged in two columns on each page as at present, will run across the page. In the great majority of cases the articles, packing specifications, ratings both less than carload and carload, and carload minimum weights will be on one line. This alone will greatly reduce the size of the Classification. The long package specifications which require considerable detail will be placed in a special section of the Classification and be referred to by number. There will be as much simplification of package specifications as possible. Items in the section containing ratings will be numbered consecutively from beginning to end and these numbers will remain permanent as far as possible."

All of this was in answer to this question from the commission: "Have you under consideration any plan to simplify the classification? If so, describe it." Answering the same question the Western Classification Committee referred only briefly to the work of the Classification Simplification Committee; but in addition

it submitted a table to show that the matter of simplifying the classification "has been in progress for several years, through consolidation of entries and reduction in number of items and ratings." The table, showing the number of ratings in Western Classifications Nos. 63 to 68, inclusive, reveals that Classification No. 68 had 14,836 ratings as compared with Classification No. 63's 17,442—a reduction of 2,606 ratings in the face of the fact that "hundreds of new items have been added."

Another commission question called for a statement of the principles which determine the assignment of articles to various classes in the classification; while a third asked if the same principles are observed today as were applied 10 years ago. Answers to the latter were generally to the effect that while the principles underlying the classification remain unchanged, the development of competing transportation agencies has materially lessened the influence of the value-of-service factor and made shipping weight density the "dominant consideration."

A fourth commission question asked if the railroads had under consideration any plan for completely unifying or for promoting greater uniformity among the three major freight classifications. The answers cite the trend toward uniformity, but point out the impossibility of accomplishing complete uniformity without a complete revision of rate scales, in which connection "revision" would perhaps mean "reduction." As one of the answers put it, "Shippers desire uniformity when it results in reductions and violently oppose advances to secure uniformity." Another said that when "uniformity" means reductions, "otherwise uncalled for" and "unnecessary," it becomes unjustifiable."

### Thousands Visit U. P. Museum

A total of 46,280 persons from every state in the United States and from 24 other countries visited the Union Pacific Museum during its first year of public exposition. The museum, containing relics and historical items which had a part in the building of the west, was opened at Omaha, Neb., on August 8, 1939.

### Electrical Workers Change Railroad Office

J. J. Duffy, international vice-president, International Brotherhood of Electrical Workers, announces that his office, which has charge of all matters pertaining to membership of the brotherhood employed by railroads, has transferred from its present address at Bremer arcade, St. Paul, Minn., to 330 South Wells street, Chicago, effective September 15.

## Super Highways Again Discussed

Representative Snyder rings in national defense angle and cites his bill

Superhighways were discussed again in the House of Representatives on September 9 by Representative Snyder, Democrat of Pennsylvania, who suggested that his speech in that connection would be of interest "only to those who are concerned with the national defense and the security of the nation for all time." Mr. Snyder recalled how he has for several years been contending that the House might well consider the question of building highways "across the nation throughout its length and across its breadth"; and he doesn't mean highways "to last 50 or 100 years, but 1,000 years or more."

In the latter connection Mr. Snyder cited his pending bill which calls for a highway "eight lanes wide, with 11 to 12 feet in each lane, and a right-of-way 500 feet wide, all leveled down." He estimated that the 16,000 miles he is thinking about would cost about \$8,000,000,000; but he has no definite idea as to where the money is coming from. He would like to see the roads built by private industry, "backed by something like the Reconstruction Finance Corporation." Asked by Representative Hoffman, Republican of Michigan, if the Public Roads Administration had been consulted, Mr. Snyder replied that they had a copy of his bill. Noting that the Administration had made no report to Congress, Mr. Hoffman next asked if Mr. Snyder were inaugurating a new way of bringing a bill before the House, i. e., bringing in a report himself instead of letting a committee do the job. Mr. Snyder replied that he had been advocating superhighways for six to eight years. "I see," said Mr. Hoffman. "And this is an election year, too!"

Meanwhile Mr. Snyder had cited the recently-completed Pennsylvania Turnpike between Harrisburg and Pittsburgh, constructed at a cost of about \$70,000,000 with the aid of an outright grant of \$29,000,000 from the federal government and an R. F. C. loan for the balance. He indicated that the Pennsylvania Railroad and other big industries did not oppose the project, adding: "When big business such as United States Steel, General Motors, and those people, get behind something and push it, I think they are doing it from the standpoint of sound business procedure."

Other participants in the discussion were Representative McCormack, Democrat of



Massachusetts, who predicted that "in the near future a chain of highways as outlined by the gentleman from Pennsylvania will be constructed and put into operation"; and Representative Peterson, Democrat of Florida, who thought "the gentleman deserves the commendation of the nation for his consistent work—I believe he will be rewarded by success in this project which will be so vital to the national-defense program of the United States." A few other members spoke briefly to get in a word for their home districts as desirable areas for the superhighways to pass through. Also, Mr. Snyder had something to say about what he regards as an insufficient interest on the part of the railroads in serving small communities; and about the possibilities which he sees in his plan for a solution of the unemployment problem.

### R. B. A. to Meet November 14

The Railway Business Association will hold its 32nd annual dinner at the Commodore hotel, New York, on Thursday, November 14. It is expected that about 1,200 members and their guests will be present.

### Wilmington Traffic Club Runs Traffic Course

The Traffic Club of Wilmington, Del., opened its first traffic course on September 11. Held on second and fourth Wednesdays and continuing until May 28, 1941, sessions are held from 7 to 9 p. m. and are under the guidance of Dr. G. Lloyd Wilson, professor of transportation at the University of Pennsylvania and vice-president in charge of transportation and research of the Associated Traffic Clubs of America.

### C. & N. W. Reorganization Plan Approved by Federal Court

The plan of the Interstate Commerce Commission for re-organizing the Chicago & North Western was approved by the Federal District court at Chicago on September 11. Federal Judge John P. Barnes declared in a 53-page opinion that the I. C. C. plan was not the "best possible plan", but that it is fair and equitable and should be pursued in moving the property out of court as rapidly as possible.

### The Santa Fe Salutes Livestock Industry

The Atchison, Topeka & Santa Fe has recently prepared for distribution a 35-page booklet in stiff covers describing the livestock industry in the United States. Separate sections deal with development of the industry, importance of meat in the diet, significant changes in breeding of cattle, sheep and hogs, marketing, packing and transportation. The booklet is copiously illustrated with up-to-the-minute photographs.

### Bonds for Central Greyhound Terminal at Buffalo, N. Y.

Central Greyhound Lines of New York, subsidiary of the New York Central's affiliate—Central Greyhound Lines—has applied to the Interstate Commerce Commission for authority to issue \$219,000 in 10-year 3¾ per cent installment bonds to finance in part the construction of a new

### Threatened Express Strike Won't Come Off

Assurance that there will be no interruption of express service has been made public in a joint statement by Presidents L. O. Head of the Railway Express Agency and G. M. Harrison of the Brotherhood of Railway Clerks dated September 5. At a conference on that day it was agreed that recommendations of the President's emergency board, published on August 2, on matters of controversy between the parties would be accepted. It was stated that all other matters of controversy "have been satisfactorily adjusted."

As was reported in last week's *Railway Age* the clerks' brotherhood differed from the Railway Express Agency on application of the findings of the fact-finding board and as the expiration of the 30-day "status quo" period approached Mr. Harrison announced that his negotiating committee possessed the power to fix the date for a strike.

It is understood that conferences between the two negotiating committees are continuing in New York to settle differences of opinion with respect to changes in working agreements which were not covered specifically by the emergency board. In issuing the joint statement both parties agreed, however, not to make further statements to the press until negotiations are entirely completed.

Buffalo, N. Y., bus terminal which will cost a total of \$330,000. Central Greyhound Lines has applied for authority to guarantee the issue.

### Ohio Valley Board to Meet September 17

The Ohio Valley Transportation Advisory Board will hold its 58th regular meeting at the Lincoln hotel, Indianapolis, Ind., on September 17. At luncheon, Judge R. V. Fletcher, vice-president and general counsel, Association of American Railroads, will discuss "The Transportation Outlook." Among special committee reports will be that of the Car Efficiency Committee on national defense and "Transportation Legislation of 1940."

### August Employment 5.4 Per Cent Above Last Year

Railroad employment increased another 0.87 per cent—from 1,050,254 to 1,059,364—during the one-month period from mid-July to mid-August, while the August total was 5.4 per cent above that for August, 1939, according to the Interstate Commerce Commission's compilation based on preliminary reports. The index number, based on the 1923-1925 average and corrected for seasonal variation, stood at 57.9 for August, as compared with July's 57.3 and August, 1939's 54.9.

August employment in all groups was above that of July as well as being ahead of August, 1939. Increases over July were

less than one per cent, except for the rises of 1.08 per cent and 1.31 per cent, respectively, in the maintenance of way structures group and the train and engine service group. The largest increase over August, 1939, was in the maintenance of equipment and stores group, up 9.73 per cent. Meanwhile the train and engine service group was up 5.68 per cent, and the maintenance of way and structures group increased by 4.91 per cent.

### Roadmasters Convention Draws Large Attendance

More than 400 railroad men and a total registration of 500 railway and railway supply men gathered for the fifty-fifth annual convention of the Roadmasters and Maintenance of Way Association at the Hotel Stevens, Chicago, on Tuesday-Thursday of this week. The convention was characterized by unusually active discussion through all sessions. More than 700 persons attended the banquet given by the Track Supply Association on Wednesday evening. The convention closed on Thursday afternoon with an inspection of the terminals of the Milwaukee railroad.

### Maryland Cannot Tax B. & O. Rolling Stock

Rolling stock of the Baltimore & Ohio operated on its main line is not subject to taxation in the state of Maryland because the 1826 charter of the road exempts its cars and locomotives from state taxation in perpetuity. This was the ruling by Judge W. C. Smith of the Federal Circuit Court in a decision of August 30 reversing a ruling of the State Tax Commission. The latter assessed the road's rolling stock operating in the state at \$4,131,245, on which taxes and penalties would have exceeded \$300,000.

### I. C. Hands Out Descriptive Folders

The Illinois Central has recently prepared for public distribution a small folder of 30 pages containing a number of miscellaneous items of information concerning the road and its past. Entitled "Come Back Again!" and sub-titled "Some Things We'd Like to Have You Remember Us By," the pamphlet is presented to patrons of the road "with the compliments of all the members of the Illinois Central family."

Included in the array of interesting facts presented is a description of the agricultural and industrial promotion work of the road, its handling of export business, its motive power roster, recent improvements in freight service, make-up of its personnel, the territory it serves, the legend of Casey Jones and the Illinois Central career of Abraham Lincoln. The folder also contains a large-sized map of the system which identifies the constituent roads which compose it and dates of consolidation. A message of President J. L. Beven enunciates the "Declaration of Policy" of the road.

### "Steel" Publisher Dies at 78

John A. Penton, chairman of the board, Penton Publishing Company, Cleveland, O., publishers of "Steel," "Daily Metal Trade" and other books and periodicals in

the metal industry, died at his home in Santa Barbara, Cal., on September 9, at the age of 78. Born in Ontario in 1862, Mr. Penton came to the United States in 1883 and became naturalized. After a long career in the iron foundry industry in different sections of the country, he organized the "Foundry" in 1892 and in 1901 he participated in the organization of the Iron & Steel Press Company at Cleveland. This was succeeded in 1904 by the formation of the Penton Publishing Company.

### 100 Per Cent Rule Applies at Coal Washers and Coke Ovens

The so-called 100 per cent rule covering the placement of cars for coal loading applies not only to mines but also to coal washers and coke ovens located at or adjacent to coal mines, according to a notice issued on September 10 by W. C. Kendall, chairman of the Car Service Division, Association of American Railroads. Mr. Kendall's notice supplements the one issued on June 28, which, as noted in the *Railway Age* of July 6, page 51, reinstated as of July 15 the 100 per cent rule which provides that no car shall be placed at a mine when the number of "no-bill" open-top cars already held at such mine is equal to or in excess of its daily rated capacity.

### I. C. C. Changes Its Mind on Truck Certificate Terms

The Interstate Commerce Commission, Division 5, has voted to rescind its action of April 3 whereby it adopted and prescribed certain special terms, conditions and limitations to be attached to the exercise of the privileges granted in all the certificates of common carriers of property by motor vehicle authorized to transport general commodities over regular routes. The notice setting forth the Division's action of April 3 was noted in the *Railway Age* of April 6, page 644; this is now superseded by the new notice which says that "it will be understood that the use of such special terms, conditions and limitations in the issuance of such certificates by the commission will be discontinued."

### 50-Ft. Box Cars Getting Scarce

Because of the "evident necessity for a general tightening up in the handling of 50-ft. box cars," Chairman W. C. Kendall of the Car Service Division, Association of American Railroads, has sent out a circular requesting all railroads to issue specific instructions "to your local people in order that all concerned in active car handling may be properly informed." In another place the circular suggests that "in any planning for additional equipment careful consideration should be given to the possible need for increasing the supply of 50-ft. cars."

"With car loadings gradually increasing week by week, the demands on the box car supply are growing proportionately," Mr. Kendall said. "A considerable volume of closed car traffic requires 50-ft. cars, particularly long-haul business from the far West, as well as an increasing amount of traffic in the East and Southeast. There is evidence already of much national defense traffic for which the large cubical capacity box cars will be required and

### Ethiopians in the Woodpile of Mr. Eastman's Scholarship

A 16-page illustrated booklet in two colors which simply and clearly devastates the claim of over-payment by highway users in the Eastman "Public Aids to Transportation" report has recently been prepared for public distribution by the Association of American Railroads. Entitled "Who Pays?" the booklet is written in a novel style of running commentary which is continued from page to page, embracing but a few simple statements in large type on each and interspersing graphs and illustrations in logical order without break.

In this fashion the publication dissects the Eastman report as it applies to highways and railroads and finds, to mention a few curiosities, that (1) it does not account for land on which highways are built and which has been permanently "drained" from tax-paying resources; (2) of the 25½ billion-dollar highway cost 1921 to 1931 inclusive, vehicle users paid only 10½ billion; (3) the report's conclusion that users have paid more than their share of road costs is based entirely on the arbitrary way in which it assigns cost; and (4) the strange finding that big trucks should pay one cent for each ton moved ten miles while passenger cars should pay 2.6 cents for each ton they move a corresponding distance. The A. A. R. book also describes the contrast between the principles applied by the report to highways and railroads. Increase in land values and social benefits are the basis for assigning half the cost of roads and streets to general taxpayers, but similar social results of railroads are not credited to them. Further, land is not counted as part of the cost of highways, "but every sort of public aid in securing land for railroad right-of-way is charged against the railroads—and charged not at the value of the land when it was granted, but at its value long after the building of the railroads had made it valuable."

this type of loading will rapidly increase through the Fall and Winter into next year.

"Specific requests for assistance in securing more prompt return of 50-ft. cars to owners have been received from Eastern, Southern and Western roads. Without attempting to catalogue all such situations, our attention has been directed to government truck orders to be shipped on the Grand Trunk Western, Michigan Central and Reading, requiring both device-equipped and non-device 50-ft. cars; heavy furniture orders in the Southeast, particularly on the Atlantic Coast Line, and far Western requirements, particularly on the Great Northern, Chicago, Milwaukee, St. Paul & Pacific, Northern Pacific, South-

ern Pacific, Union Pacific and Western Pacific. Undoubtedly other similar situations will be reported."

With further reference to the car requirements for government truck orders, Mr. Kendall on September 4 had issued another circular reinstating Special Car Order No. 40, which had been cancelled on July 9, after having been originally issued March 6 to expedite the return of G. T. W. 50-ft. end-door automobile box cars. The reinstated order, effective September 10, requires the empty return to owners of G. T. W. box cars of the aforementioned dimensions. The order was necessary because of "exceptionally heavy government truck order" which will require cars for loadings "ranging upwards to more than 70 car-loads per day, starting this month."

### July Accident Statistics

The Interstate Commerce Commission on September 11 made public its Bureau of Statistics' preliminary summary of steam railway accidents for July and this year's first seven months. The tabulation, which is subject to revision, follows:

Item	Month of July		7 months ended with July	
	1940	1939	1940	1939
Number of train accidents	579	465	3,987	3,213
Number of casualties in train, train-service and nontrain accidents:				
Trespassers:				
Killed	251	262	1,168	1,309
Injured	234	274	1,163	1,382
Passengers on trains:				
(a) in train accidents*				
Killed	40	...	66	1
Injured	30	157	589	331
(b) In train-service accidents				
Killed	3	...	4	5
Injured	183	199	951	979
Travelers not on trains:				
Killed	...	2	3	5
Injured	52	70	480	472
Employees on duty:				
Killed	53	31	296	268
Injured	1,557	1,406	10,105	9,262
All other nontrespassers:**				
Killed	149	107	1,112	841
Injured	357	360	3,310	2,907
Total—All classes of persons:				
Killed	496	402	2,649	2,429
Injured	2,413	2,466	16,598	15,333

\* Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former cause damage of more than \$150 to railway property.

\*\* Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties for all classes of persons, including both trespassers and nontrespassers, were as follows:

Killed	129	94	1,010	774
Injured	209	222	2,381	2,068

### Experimental Diesel Freight Locomotive Now on B. & M.

The big Diesel-electric freight locomotive developing 5,400 engine hp. built by the Electro-Motive Corporation at the beginning of the year for experimental operation and since operated on a number of roads, chiefly in the West, moved onto the lines of the Boston & Maine on September 5, where it will be used on experimental runs on fast through freight trains for the next few weeks. The locomotive, which consists of two locomotives of two units each coupled back to back, is 193 ft. long and weighs 912,000 lb. (see the *Railway*



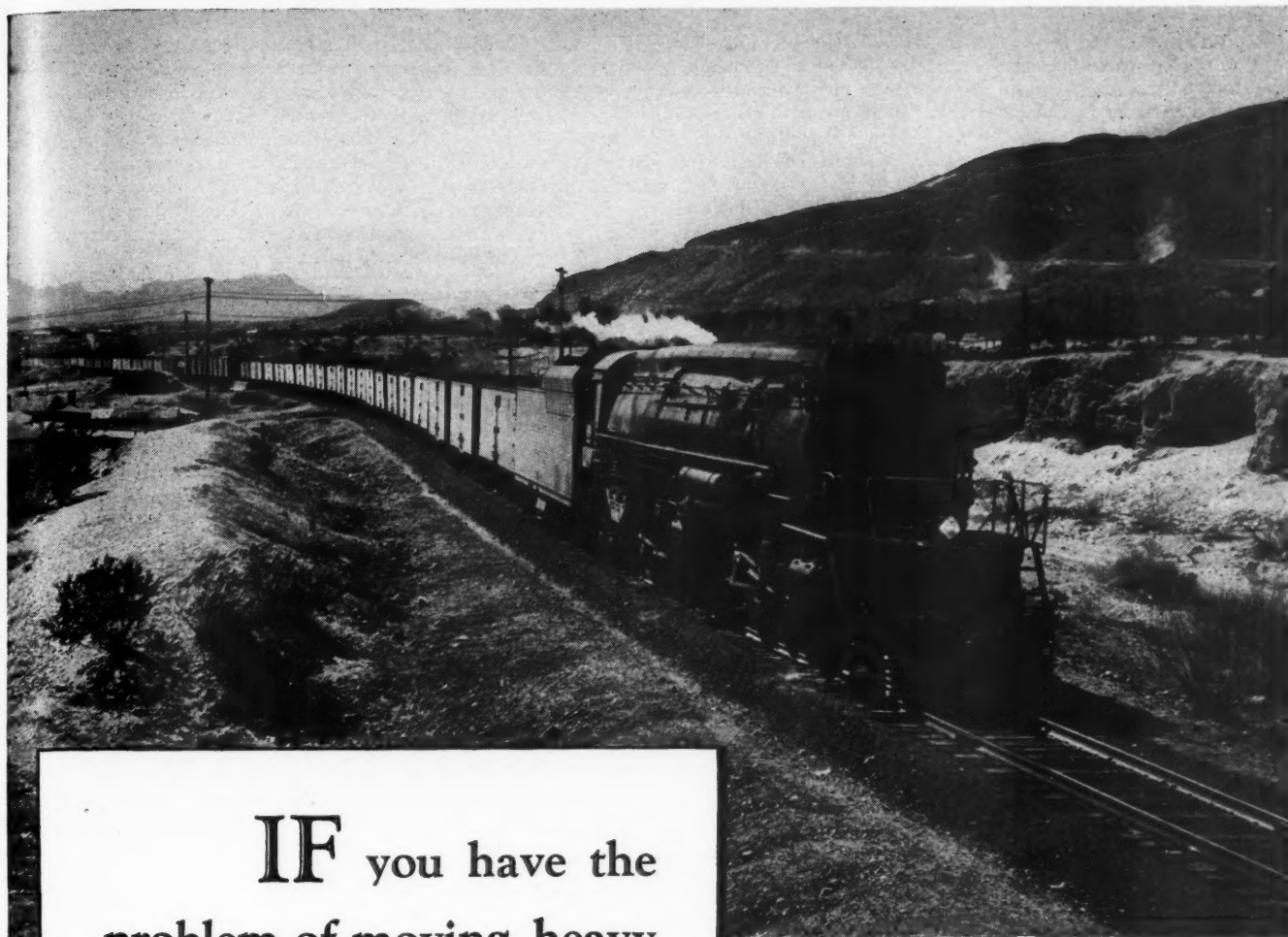


Photo courtesy Southern Pacific Company

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Age of May 25, page 930). Its first job on the Boston & Maine was to haul a 4,500-ton, 83-car freight train in record-breaking time from the Mechanicville (N. Y.) yards to Somerville, Mass.

### Freight Car Loading

Loadings of revenue freight for the week ended September 7, which included the Labor Day holiday, totaled 695,258 cars the Association of American Railroads announced on September 12. This was a decrease of 73,563 cars or 9.6 per cent below the preceding week, but an increase of 32,901 cars, or five per cent, over the corresponding week last year, and an increase of 126,551 cars, or 22.3 per cent, above the comparable 1938 week.

Loadings of revenue freight for the week ended August 31 totaled 768,821 cars. This was an increase of 7,819 cars, or 1.0 per cent, above the preceding week, an increase of 52,424 cars, or 7.3 per cent, above the corresponding week in 1939, and an increase of 120,792 cars, or 18.6 per cent, above the same week in 1938.

The summary as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading			
For Week Ended Saturday, August 31			
Districts	1940	1939	1938
Eastern .....	153,689	145,444	131,836
Allegheny .....	162,829	137,795	118,380
Pocahontas .....	52,253	50,746	47,297
Southern .....	103,451	101,519	95,775
Northwestern .....	132,455	119,340	97,658
Central Western .....	113,185	111,522	106,424
Southwestern .....	50,959	50,031	50,659
Total Western Districts .....	296,599	280,893	254,741
Total All Roads .....	768,821	716,397	648,029
Commodities			
Grain and grain products .....	37,333	40,200	42,016
Live stock .....	16,168	14,017	14,645
Coal .....	138,474	127,557	116,566
Coke .....	11,595	7,575	5,102
Forest products .....	38,637	33,232	30,080
Ore .....	69,290	52,491	26,593
Merchandise l.c.l. .....	153,660	156,865	155,153
Miscellaneous .....	303,664	284,460	257,874
August 31 .....	768,821	716,397	648,029
August 24 .....	761,002	683,906	620,557
August 17 .....	743,121	669,793	597,884
August 10 .....	726,976	661,023	589,568
August 3 .....	718,430	656,553	584,062

Cumulative Total,  
35 Weeks ... 23,450,497 21,183,708 19,543,673

**In Canada.**—Carloadings for the week ended August 31 were 60,477, as compared with 59,400 in the previous week and 65,314 a year ago, according to the weekly resume issued by the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
Aug. 31, 1940 .....	60,477	24,037
Aug. 24, 1940 .....	59,400	23,784
Aug. 17, 1940 .....	57,121	23,362
Sept. 2, 1939 .....	65,314	19,529

Cumulative Total for Canada:		
Aug. 31, 1940 .....	1,803,434	851,573
Sept. 2, 1939 .....	1,558,093	704,968
Sept. 3, 1938 .....	1,556,656	703,044

### Pacific Northwest Board to Meet September 19

The Pacific Northwest Advisory Board will hold its 46th regular meeting at the Davenport hotel, Spokane, Wash., on September 19 and 20. C. H. Buford, vice-president, Operations & Maintenance department, Association of American Railroads, will address a luncheon on the latter date sponsored jointly by the board and the

Spokane Chamber of Commerce in which he will describe steps taken by the roads to insure adequate car supply and traffic movement. Two preliminary readings will precede the business session of the board—one of the Agricultural Council on the afternoon of September 19 to discuss the Columbia Basin reclamation farming project and the other of the Freight Loss & Damage Prevention committee on the afternoon of the same day.

### Would Take Unemployment Insurance Bill from House Committee

Representative Peterson, Democrat of Florida, has filed in the House of Representatives a petition to have the House committee on interstate and foreign commerce discharged from further consideration of S. 3920, the Senate-approved bill which embodies railway labor's plan for liberalizing benefits under the Railroad Unemployment Insurance Act. As this issue went to press, the Peterson petition had 87 of the 218 signatures necessary to discharge a committee and bring a bill on the floor of the House.

As noted in the *Railway Age* of August 31, page 319, members of the House committee have been staging something of a "sit-down" strike on this unemployment insurance bill, the committee having scheduled a couple of meetings at which not enough members to constitute a quorum appeared.

### Belgian System Hastens Reconstruction

The Belgian National Railways expects to complete restoration of service on almost all of its 3,000-mile system by the end of September. On August 4 it was reported to a local representative of the United States Bureau of Foreign & Domestic Commerce that service had been resumed on more than 600 miles of track and that up to that date engineers employed by Germany had repaired 40 major bridges and that forces of the Belgian system rebuilt about 160 smaller spans that were destroyed or damaged in Ger-

many's successful campaign to conquer the country. It was also reported that reconstruction of electrified lines between Brussels and Antwerp was expected to require some time in view of the concentrated nature of the territory. Rolling stock of the system is nearing normal proportions except for a number of units which are still in service in France.

### Railroad Y's to Launch Membership Campaign

Railroad Y. M. C. A.'s will launch an intensive campaign in the United States and Canada on October 1 to acquaint more railroad employees with the wide facilities and benefits of membership and give the Railroad "Y" a larger scope in the industry by serving more of its personnel. A committee has been appointed in charge of the campaign consisting of the following railroad officers: Chairman—J. G. Walber, vice-president (personnel), New York Central; H. J. Humphrey, vice-president and general manager, eastern lines, Canadian Pacific; E. B. Moffatt, general superintendent, Delaware, Lackawanna & Western; C. M. Kimball, executive representative, Southern; C. F. Larson, superintendent of safety, Missouri Pacific; E. G. Wright, assistant superintendent, New York Central; O. W. Snoddy, superintendent, Pullman Company, and W. M. Smith, executive assistant, Railway Express Agency.

In addition, a number of railroad labor executives are on the committee as follows: G. M. Harrison, grand president, Brotherhood of Railway Clerks; B. M. Jewell, chairman, Railway Employees department, American Federation of Labor; A. Johnston, chief engineer, Brotherhood of Locomotive Engineers; D. B. Robertson, president, Brotherhood of Locomotive Firemen & Engineers; J. A. Phillips, president, Order of Railway Conductors of America; A. F. Whitney, president, Brotherhood of Railroad Trainmen, and M. S. Warfield, president, Order of Sleeping Car Conductors.

Publicity for the membership campaign is now in the hands of a committee com-

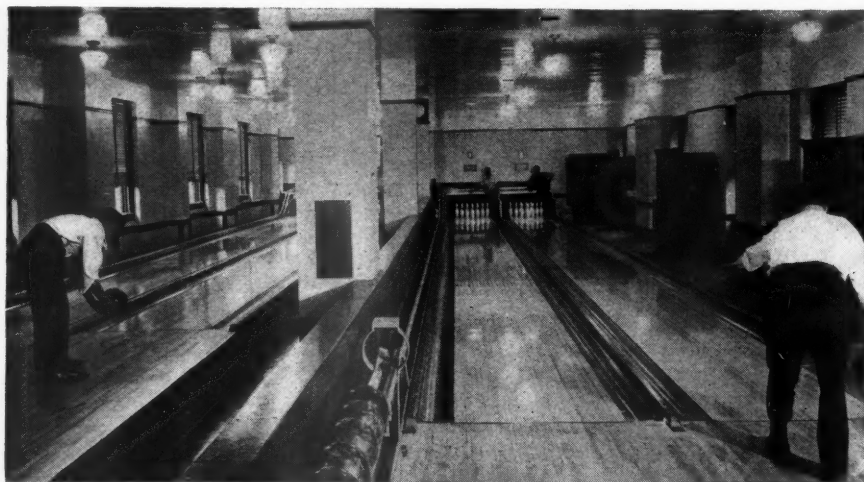


Photo by Newspictures, New York

Railroad Y. M. C. A.'s not Only Furnish Living Quarters For Transportation Department Men at Away-From-Home Terminals But as Well Constitute a Center of Recreation, Social Activity and Education for all Railroad Workers. Here is a View of the Alleys Located in the Y. M. C. A. in Pennsylvania Station, New York, with Two Members Trying to Upset Some—or All—of the Tenpins

Continued on next left-hand page



## FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK

CHICAGO

MONTREAL

*It weighs  
only  
10 lbs.*

**. . . yet makes possible  
a better lubricating job**

Weight has been drastically reduced in the new No. 8 Combined Lubricator & Spreader . . . and an even better lubricating job is being done. This has been made possible by the use of fabricated steel, and results in a stronger, more snugly fitting unit that weighs less than half of the old cast steel spreader, cellar and end plate. The new cellar, which weighs only 10 lbs. (43 lbs. less), is reversible and more easily handled. By reversing, tapered grease cakes may be fully consumed, thus increasing mileage and decreasing the cost of lubrication. Specify the Franklin No. 8 Lubricator & Spreader for new power and for replacements.



posed of editors and public relations officers of various railroad and labor publications, and articles have already begun to appear in labor union organs and railroad employees' publications. Individual "Y" associations have drawn up plans for the organization of teams which will canvass potential members in every branch of transportation service of American and Canadian railroads.

The first Railroad Y. M. C. A. was organized in a back room of the Lake Shore station at Cleveland, Ohio, in 1872. From that beginning the Railroad Y. M. C. A. has grown to an international organization comprising 181 associations on 51 railroad systems. Each organization is autonomous, electing its own officers.

### R. F. C. Sells Equipment Trust Certificates

The Reconstruction Finance Corporation has sold seven issues of equipment trust certificates, aggregating \$22,218,000, to a group consisting of Salomon Brothers & Hutzler and Dick & Merle-Smith of New York and Stroud & Co. of Philadelphia, Pa. The average price paid was 102½% and accrued dividends, and represents a premium of \$583,222.

The issues sold and the approximate prices and yields represented in the sale price are as follows:

		Approximate Price	Approximate Yield (Per Cent)
\$4,922,000	Chicago, Milwaukee, St. Paul & Pacific, Series "U".....	103.17	1.76
\$877,000	Chicago, Milwaukee, St. Paul & Pacific, Series "M".....	102½	1.77
\$60,000	Chicago, Milwaukee, St. Paul & Pacific, Series "N".....	102½	1.53
\$4,750,000	Northern Pacific..	103½	1.99
\$9,150,000	Wabash, Series "H".....	102	1.91
\$1,403,000	New York, New Haven & Hartford .....	102	2.02
\$1,056,000	The Kansas City Southern Series "G" .....	102½	1.96

All the issues carry 2½ per cent except the Northern Pacific issue which carries 2¾ per cent.

### Descendant of Country's Oldest Railroad to End Passenger Service

The New York, New Haven & Hartford has been granted approval by the Massachusetts Department of Public Utilities to discontinue passenger service, effective September 30, on the West Quincy (Mass.) loop of the leased Old Colony. This branch, between Atlantic and Braintree, is a direct descendant of the Granite Railway Company, the first corporation to build and operate a railroad in the United States. Incorporated March 4, 1826, the line was built to convey granite from the Quincy quarries to Milton, on the Neponset River, for use in the construction of Bunker Hill monument in Boston. Horses supplied the motive power.

In 1846 the company extended its services to include the transportation of passengers and general freight and was authorized to use steam power. In 1871 the Old Colony acquired the right-of-way and used a portion of it for its West Quincy loop over which it began to operate pas-

senger trains in October of the same year. The West Quincy branch is included in the so-called "Boston group" of the Old Colony, complete abandonment of which has been recommended by Examiner W. J. Schutrumpf of the Interstate Commerce Commission.

### Rutland Strike Date Postponed

A strike of the 1500-odd employees of the Rutland which was scheduled for 6 p.m., September 11, in opposition to a wage reduction on a sliding scale from 10 to 30 per cent originally made effective September 12, has been postponed until at least September 15 and the wage cut deferred until the following day, after conferences between railroad and labor officers and members of the National Mediation Board at Washington, D. C., starting last weekend.

The Mediation Board had withdrawn its services when negotiations on the wage cut reached a deadlock and both sides refused arbitration (see the *Railway Age* for August 24, page 295) but offered to re-open conferences after the labor officers announced a walk-out last week. Members of the Board were scheduled to arrive in Rutland, Vt., on September 12 to confer further with representatives of both parties and United States District Judge J. P. Leamy, who has jurisdiction over the Rutland's receivership proceedings. Just prior to the announcement of the deferment of the strike, Governor G. D. Aiken of Vermont declared that he would ask President Roosevelt to appoint an Emergency fact-finding board to investigate the background of the deadlock and freeze the status quo in the interim, as is provided in the Railway Labor Act.

### Mexican Workers Administration Appoints New Board

A new board of directors of the Workers Administration of the National Railways of Mexico has been formed following the presentation of a reorganization plan to President Cardenas by the convention of the Union of Mexican Railway Workers. Under this plan, described in the *Railway Age* of August 10, page 230, the Workers Administration will function entirely independent of the union and members of the Administration's board will be disconnected from their departments. Manuel S. Mayagoitia has been appointed president of the Board of Directors and general manager of the Workers Administration of the National Railways of Mexico and the following have been appointed members of the new board: Sixto Martinez from the motive power and machinery department; Camilo Picone from the maintenance-of-way and structures department; Sebastian Gutierrez from the traffic department; Jesus Zertuche from the accounting department; Rodolfo C. Rodriguez from the telegraph and electrical department and Jose Gutierrez from the express department.

### Consider British Rate Rise

The British Charges (railway control) Consultative committee opened public hearings at Aldwych, England, on August 26 to consider the proposals of the Railway

Executive Committee for an increase in railroad rates of 6.8 per cent in addition to an increase of 10 per cent on fares and freight rates authorized last May. It was explained that under war-time machinery the jurisdiction of the Railway Rates Tribunal with respect to the general level of rates has been suspended and that instead Minister of Transport John Reith has referred the railroad petition to a special Consultative committee which consists of permanent members of the Railway Rates Tribunal acting in an advisory capacity.

Under this machinery the Railway Executives Committee estimates each quarter the effect of changes in working costs and other conditions (as, for example, the cost of meeting charges for war damages) and the loss of earning power due to war conditions, which estimate they submit to the Minister of Transport together with proposals for increases in rates. The Minister of Transport announced on August 24 that the Railway Executives Committee submitted an estimate of £46,000,000 (\$185,840,000) as representing the increase in operating expenses between September 1, 1939, and September 30, 1941, made up of the following:

Items	£
Wages .....	20,100,000
Allowances to staff serving with His Majesty's Forces .....	3,600,000
Materials (including coal) .....	15,900,000
Other items in connection with conditions arising out of the war, i.e. black-out, air raid precautionary measures, loss of earning power of London Passenger Transport Board .....	6,400,000
Total .....	£46,000,000

It is also announced by the Minister of Transport that instructions have been issued to the effect that the railroads may transport shipments in open freight cars if neither box cars nor sheets (tarpaulins) are available and congestion is likely to result if shipments are not immediately dispatched. It is pointed out that sheets for covering open cars are manufactured from flax, the usual sources for supply for which are not now available. In connection with this instruction, the minister has issued an order under defense regulations relieving railroads from liability to damage to shipments carried unsheeted in accordance with instructions.

### Roads Reject Rate Cuts on Anthracite

Representatives of nine anthracite-carrying railroads rejected a proposal to reduce rates on hard coal from Pennsylvania at a closed meeting with spokesmen for the Anthracite Institute, mine operators and two members of the governor's cabinet of the Commonwealth of Pennsylvania on September 5. The railroads contended that suggested rate reductions to meet motor truck competition with respect to domestic sizes and competition with bituminous coal on steam sizes would not gain sufficient tonnage to warrant their acceptance.

They pointed out that a reduction of 20 cents a ton in prepared domestic sizes to eastern and central New York State would raise railroad shipments not more than 92,000 tons per annum, which gain would be





## THIAGO VIADUCT

### PORTUGAL

This structure is located in the Vale of Vouga, and was built in 1913. The total length of the viaduct is 660 ft., and the extreme height at rail level is 98 ft. There is one central arch of 185 ft. span; seven arches of 45 ft. span each; and four arches of  $32\frac{1}{2}$  ft. span each. Local stone was employed for the construction throughout. The viaduct is used to carry the heavy passenger and freight traffic of the steam-operated Portugese Rail-

ways. . . . 31 years ago the American Arch Company demonstrated to the railroads the practicality of standardizing Arch tubes and Arch Brick sizes and designs. Today, although it has been constantly developed to keep pace with modern railroading, the Security Sectional Arch is still standard on American railroads.

*There's More to SECURITY ARCHES Than Just Brick*

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REFRACTORIES CO.**

***Refractory Specialists***



**AMERICAN ARCH CO.  
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more than offset by the loss in revenue. It was the contention of the Anthracite Institute that the railroads' great necessity was to retain existing tonnage rather than increase it. The railroads rejected the proposal to reduce rates on industrial sizes to points on the Atlantic seaboard from the Virginian border to eastern New York State on the grounds that anthracite producers are already shipping and selling all the steam sizes they can produce.

It was reported that the Commonwealth Department of Commerce and representatives of the coal producing industry will canvass opinion on initiating proceedings before the Interstate Commerce Commission to gain acceptance of their proposal. The meeting was the fourth of a series arranged by State Secretary of Commerce R. P. Brown in response to a state law enacted in 1939 directing the Attorney General to oppose increases in anthracite rates and obtain reductions wherever possible.

### "National Defense" Rivers and Harbors Bill Growing

The "national defense" rivers and harbors authorizations bill has grown into a \$35,303,000 measure as a result of further consideration by the Senate committee on commerce to which it was recently returned after the committee received from President Roosevelt a letter withdrawing his previously-expressed opposition to an authorization of \$465,000 for work on Charleston, S. C., harbor. As noted in the *Railway Age* of June 22, the bill—H. R. 9972—was passed by the House with authorizations totaling \$24,823,000; but this was cut by \$6,131,000 in the Senate committee's first report which omitted eight House-approved items at the request of the President.

Then came the President's letter withdrawing his opposition to the Charleston harbor work, and Chairman Bailey of the commerce committee asked to have the bill recommitted. The committee then proceeded to restore all items passed by the House except the \$120,000 project on the Thames River, Conn., which had got out of the authorization class by reason of the fact that the Navy Department has already started work on it. In addition, the authorization for work at Los Angeles and Long Beach harbors, Calif., was modified in such a way as to increase the amount authorized from \$7,074,000 to \$17,674,000.

This rivers and harbors bill was introduced as a national defense measure after President Roosevelt had vetoed the \$109,985,450 rivers and harbors bill (H. R. 6264) with a promise to approve authorizations for projects "of national defense value."

### Apportionment of Authorizations for Grade Crossings

President Roosevelt has signed the Federal Aid Highway Bill, which includes authorizations of \$20,000,000 for grade-crossing elimination work in each of the two fiscal years ending June 30, 1942, and June 30, 1943. Following the Presidential approval of the measure Chairman Cartwright of the House committee on roads inserted in the appendix to the September 10 issue of the Congressional Record a

table prepared by the Public Roads Administration to show the approximate apportionment of funds for each of the two fiscal years involved.

The table's figures on the apportionment of grade-crossing funds are as follows:

Alabama	\$393,000
Arizona	128,000
Arkansas	340,000
California	741,000
Colorado	251,000
Connecticut	166,000
Delaware	97,000
Florida	278,000
Georgia	489,000
Idaho	162,000
Illinois	1,030,000
Indiana	506,000
Iowa	546,000
Kansas	504,000
Kentucky	356,000
Louisiana	310,000
Maine	135,000
Maryland	200,000
Massachusetts	407,000
Michigan	647,000
Minnesota	322,000
Mississippi	310,000
Missouri	594,000
Montana	264,000
Nebraska	348,000
Nevada	97,000
New Hampshire	97,000
New Jersey	390,000
New Mexico	166,000
New York	1,334,000
North Carolina	503,000
North Dakota	308,000
Ohio	833,000
Oklahoma	457,000
Oregon	223,000
Pennsylvania	1,127,000
Rhode Island	97,000
South Carolina	297,000
South Dakota	268,000
Tennessee	373,000
Texas	1,087,000
Utah	129,000
Vermont	97,000
Virginia	372,000
Washington	300,000
West Virginia	261,000
Wisconsin	484,000
Wyoming	131,000
Hawaii	98,000
District of Columbia	98,000
Puerto Rico	149,000

### New Zealand Railway Magazine Suspends a/c Paper Shortage

Publication of the "New Zealand Railways Magazine" has been suspended indefinitely until further notice owing to the shortage of paper stocks in the country and the "necessity for conserving supplies." The magazine, which was issued monthly, was widely read in the commonwealth, for its issues dealt not only with activities on the government-owned railways but of the history and development of New Zealand as well. It had a wide newsstand sale and furnished one of the most complete pictures available of developments in that interesting member of the British Commonwealth of Nations.

### Bus Men to Meet September 18-20

The National Association of Motor Bus Operators will hold its 14th annual meeting at the Drake hotel, Chicago, from September 18 to 20, inclusive. Two full days will be given over to business sessions, while the third will consist of so-called "vendors' parties" at the Evanston Golf and Country club. Among the special addresses to be delivered, two will deal with the problem of operators of share-the-expense organizations. Orla St. Clair will speak on "How We Dealt with the Wildcat Situation on the West Coast" and J. G. Scott, chief, Section of Law and Enforcement, Bureau of Motor Carriers, Interstate Commerce Commission, will discuss "What the I. C. C. Intends to Do About Wildcat and Share-cost Operations."

## Construction

**BESSEMER & LAKE ERIE.**—Work will be carried out by company forces on the following projects: Realigning southward track and siding at Rural Ridge, Pa., to cost about \$39,000; additional yard tracks at Russellton, Pa., to cost approximately \$48,000; extension to machine and erecting shop and rearranging conduits and pipe lines at Greenville, Pa., at a cost of approximately \$72,000; additional interchange tracks at Osgood, Pa., to cost about \$26,000.

**CHESAPEAKE & OHIO.**—This road has let contracts to Haley, Chisholm & Morris, Charlottesville, Va., for the following work: For riprapping river banks at Glade, W. Va., at a cost of approximately \$125,000; for riprapping river banks at Gauley Bridge, W. Va., to cost about \$75,000; and for building eight warehouses at Morrison, Va., to cost approximately \$275,000.

**LONG ISLAND.**—Contracts have been let for work on this road as follows: To E. W. Foley, Inc., Brooklyn, N. Y., for the reconstruction of the Mineola-Roslyn Road Bridge at Roslyn, N. Y., at a cost of approximately \$100,000; to Charles F. Vachris, Inc., Brooklyn, N. Y., for grade crossing elimination work at Rockaway Beach, from Hammel to 54th street, Arverne, N. Y., at an estimated cost of \$2,300,000; to the Tomasetti Construction Co., Inc., Brooklyn, N. Y., for work in connection with the Atlantic Avenue Improvement, Sections 3 and 4, New York City, at a cost of approximately \$2,950,000.

**NEW YORK CENTRAL.**—A contract has been given to the P. T. Cox Contracting Co., Inc., New York, for the construction of a pedestrian overpass opposite West 148th Street in Riverside Park, New York, to cost approximately \$70,708. A contract has also been given to Miller-Blyth, Inc., New York, for the construction of general yard facilities building at 34th street and 11th avenue and track department facilities building at 33rd street and 11th avenue, New York, at an estimated cost of \$46,700.

**NEW YORK, CHICAGO, ST. LOUIS-PENNSYLVANIA.**—The New York Public Service Commission has approved a revised estimate of cost in the amount of \$781,490 in connection with the proposed elimination of the Central avenue, Washington avenue and Brigham road crossings of these two roads in the city of Dunkirk.

**PENNSYLVANIA AND ERIE.**—The Pennsylvania Public Utility Commission has approved a plan for the relocation of state highway route No. 238 across the Shenango river from Shenango township to West Middlesex. In addition to the construction of a new steel bridge across the Shenango river, plans have been approved providing for the elimination of grade crossings over the Pennsylvania and Erie on either side of the river by the construction of viaduct approaches. The cost of alteration of facilities of the Pennsylvania, including the construction of a new team track and driveway, is estimated at \$3,321. The alteration of facilities of the Erie, including relocation of main and side track, is estimated at \$16,869.

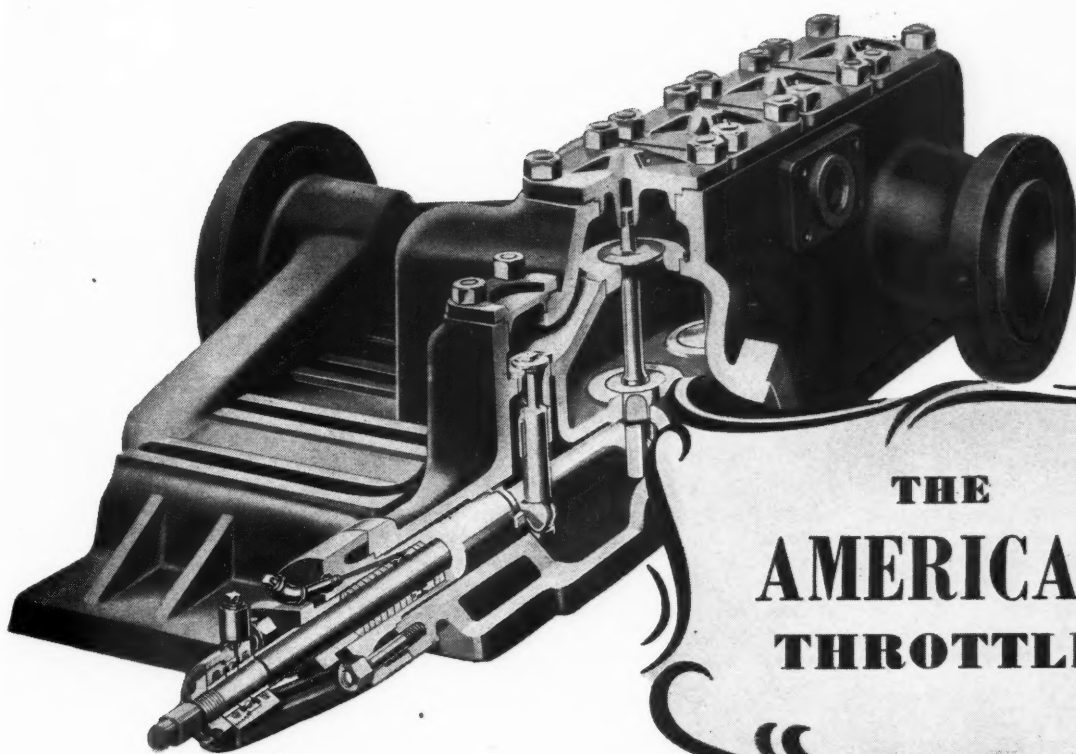
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For the past fifteen years the American Multiple-Valve Throttle has meant controlled flow of steam to the cylinders. Constant development and research in both design and materials have resulted in the present Multiple-Valve Throttle. This design has no large valves to warp and leak and assures smoothness of oper-

ation as the multiple valves open successively, giving a perfect graduation of steam under easy control of the engineman.

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## Equipment and Supplies

### Freight Car and Rail Orders—Correction

A total of 27,100 tons of rail ordered by the carriers during July, 1940, was erroneously eliminated from the total of rail buying for the year thus far appearing in the monthly summary of equipment and supplies in the *Railway Age* of September 7, page 347. As corrected the statement should read: The carriers have ordered 166,842 tons of rail during the first eight months of 1940, as compared with 532,833 tons for the corresponding period of 1939.

The total of 7,645 freight cars reported as ordered during August erroneously duplicated 60 cars and as corrected the statement should read that domestic orders for freight cars during August totaled 7,585 cars. The total for the year thus far should be changed to read 24,016 cars.

### LOCOMOTIVES

THE CHATTANOOGA TRACTION COMPANY, a subsidiary of the Southern, has ordered two 44-ton, 350-hp. Diesel-electric switching locomotives from the General Electric Company, after competitive bidding.

THE SOUTHERN has invited bids for two 600-hp. 100-ton Diesel-electric switching locomotives (wheel arrangement 0-4-4-0), bids to be received on or before Monday, September 16.

### FREIGHT CARS

THE CHICAGO, ROCK ISLAND & PACIFIC has ordered 200 50-ton box cars from the American Car & Foundry Company and 100 drop end gondola cars from the Pullman-Standard Car Manufacturing Company. Inquiry for this equipment was reported in the *Railway Age* of August 24.

THE SOUTHERN has invited bids for the following freight cars, proposals to be received on or before September 23:

No.	Type	Capacity	Length
1,500	Box (steel-sheathed)	40	40 ft. 6 in.
750	Hopper (steel)	50	.....
500	H.S. gondola (steel)	50	41 ft. 9 in.
250	L.S. gondola (steel)	50	41 ft. 6 in.

THE ATLANTIC COAST LINE has placed orders for 1,690 new freight cars as follows:

No.	Type	Builder
600	Automobile-Box	Pullman-Standard
15	Covered hopper	Pullman-Standard
100	Automobile-furniture	Mt. Vernon
50	Stock	Mt. Vernon
500	Hopper (coal)	Bethlehem Steel
200	H. S. gondola	Bethlehem Steel
100	Gondola (phosphate rock)	Bethlehem Steel
125	Flat	Greenville Steel

Inquiries for this equipment were reported in the *Railway Age* of July 13.

### IRON AND STEEL

THE RIO GRANDE DO SUL OF BRAZIL has ordered 22,500 tons of rails from the Inland Steel Company. Negotiations for

the contract were reported in the *Railway Age* of June 29, 1940, page 1198.

THE ERIE has ordered 4,000 tons of rails from the Carnegie-Illinois Steel Corporation and the Bethlehem Steel Company.

THE NEW YORK CENTRAL, by authorization of its board of directors dated September 11, will purchase 65,000 tons of rail for 1941.

### MOTOR VEHICLES

THE SANTA FE TRAIL TRANSPORTATION COMPANY has taken delivery of four 29-passenger, parlor-car-type motor buses from The a. c. f. Motors Company.

THE BIDDEFORD & SACO has received delivery of one 28-passenger, transit-type motor bus from the a. c. f. Motors Company.

## Supply Trade

John W. Montigney, manager of railroad sales of the Cleveland Tractor Company, Cleveland, Ohio, has resigned to become executive secretary of the General-Central Eastern Conference, Akron, Ohio.

P. J. Christy has been appointed manager of the Philadelphia (Pa.) office of the Chicago Pneumatic Tool Company, effective August 1, succeeding A. M. Brown, who has been transferred to Washington, D. C., as manager of a new branch opened in that city recently. C. A. Diehl has been appointed manager of the Houston, (Tex.) office.

### OBITUARY

C. M. Hoffman, who retired as vice-president of the Dearborn Chemical Company, Chicago, in 1936, died in Los Angeles, Cal., on September 9. He was



C. M. Hoffman

born in Moncton, New Brunswick, on July 29, 1870, and entered railway service as an apprentice for the Chicago, Burlington & Quincy at St. Joseph, Mo. After serving as a machinist and foreman he was pro-

moted to road foreman from which position he resigned to become master mechanic of the Southern at Princeton, Ind. After holding this position for five years he became superintendent of motive power for the St. Louis, Brownsville & Mexico at Kingsville, Tex., and five years later became master mechanic for the United Verde Mines at Clarkdale, Ariz. Later he served as master mechanic for the Denver & Rio Grande Western at Grand Junction, Colo., master mechanic for the Utah Copper Company and superintendent of motive power for the Los Angeles & Salt Lake. In 1924, he resigned from the latter position to enter the employ of the Dearborn Chemical Company as assistant to the vice-president. In 1928 he was promoted to vice-president in charge of railway sales, the position he was holding at the time of his retirement in 1936.

George N. Van Sweringen, vice-president in charge of sales of the Chicago Railway Equipment Company, who died on September 3, as reported in the *Railway Age* of September 7, was born at Ft.



George N. Van Sweringen

Wayne, Ind., on April 9, 1875. He entered railway service with the Pennsylvania at Ft. Wayne, and later was employed by the Chicago, Rock Island & Pacific. In 1909, he became a sales representative for the Chicago Railway Equipment Company, and in 1926 was promoted to assistant to the president, which position he held until July, 1935, when he was elected vice-president in charge of sales.

Abram Ladue Whipple, district sales manager of The Standard Stoker Company, Inc., with headquarters at New York, whose death was reported in the *Railway Age* of September 7, was born in Albany, N. Y., in 1872 and was educated at Highland grammar school, West Somerville, Mass. He entered railway service in 1888 as telephone operator for the Fitchburg (now Boston & Maine) and subsequently became chief clerk to the purchasing agent of that road.

In 1892 Mr. Whipple entered the railway supply business as a salesman for the Hopewell Railroad Supply Co., Boston, Mass., and later went with the Boston Woven Hose & Rubber Co. In 1895 he re-entered railroad service as assistant superintendent with the Hoosac Tunnel & Wilmington, Wilmington, Vt. Several



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Foundry, Malleable and Basic Grades.

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Standard and special sizes furnished in any Open Hearth analysis.

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All qualities, special Alloy, Annealed, Blued Finish, Hard Red, Pickled, or deoxidized to meet your needs.

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For every kind of flooring condition: "A.W." Super Diamond, Standard Diamond, Diamondette, Sunken Diamond and Ribbed Patterns. Any pattern furnished in ferrous or non-ferrous analysis.

## CUT STEEL NAILS

"Reading" Brand—all types and sizes or any special types produced.

FOR Carbon, Copper or Alloy Steels—in any Open Hearth analysis, in any quantity—ALAN WOOD can meet your specifications.

Do you want to reduce dead weight in mobile equipment, as well as stationary structures? "A.W." DYN-EL has been designed for this purpose. It has corrosion resistance better than ordinary Steel, excellent welding qualities with good forming qualities.

Do you need welding qualities, toughness, abrasion resistance, exceptional ductility or any other special qualities? There is an "A.W." Steel made to ALAN WOOD standards that will give you best results at the lowest possible cost.

The Metallurgical Department is the customer's representative in the ALAN WOOD plant—prescribing the purchaser's requirements in terms of Steel plant practice; inspecting and testing the finished product to insure compliance with purchaser's specifications.

"A.W." service includes cooperation of its entire organization to insure prompt execution of special mill orders.

# ALAN WOOD STEEL COMPANY

MAIN OFFICE AND MILLS, CONSHOHOCKEN, PENNA. : : SINCE 1826 : : DISTRICT OFFICES AND REPRESENTATIVES—Philadelphia, New York, Boston, Atlanta, Buffalo, Chicago, Cincinnati, Cleveland, Denver, Detroit, Houston, New Orleans, St. Paul, Pittsburgh, Roanoke, Sanford, N.C., St. Louis, Los Angeles, San Francisco, Seattle, Montreal—A. C. Leslie & Co. PRODUCTS INCLUDE—Steel Products in Carbon, Copper or Alloy Analyses : : Sheared Steel Plates : : Hot Rolled Sheets and Strip : : "A.W." Rolled Steel Floor Plates : : Billets, Blooms and Slabs : : "Swede" Pig Iron : : Reading Cut Nails.

years later he returned to the railway supply business with the E. T. Burrowes Co., Portland, Me., which firm was later pur-



A. L. Whipple

chased by Chicago curtain interests and is now a part of Adams & Westlake Co., as sales manager. Subsequently he became assistant sales manager, Forsyth Brothers Co., Chicago, and later sales manager and vice-president of the Railway Equipment Company of New York (now Waugh Equipment Co.). In 1925 Mr. Whipple was appointed a representative of the Locomotive Stoker Company of Pittsburgh (Pa.) and in 1928 became district sales manager of the Standard Stoker Co., Inc., at New York, when the latter purchased the patents of the Locomotive Stoker Company. He held this position until his death.

## Financial

ALABAMA, TENNESSEE & NORTHERN.—*Proposed Report on Reorganization.*—Examiner J. V. Walsh has recommended in a proposed report that the Interstate Commerce Commission approve for this road a reorganization plan under which its capitalization would be reduced from \$5,502,637 to \$3,502,661, and its annual fixed charges from \$240,876 to \$16,000. The effective date of the plan would be July 1, 1940. New capitalization and charges are recommended as follows:

Issue	Amount	Annual Requirement
First-mortgage 4 per cent bonds due 1965 .....	\$400,000	\$16,000
Sinking fund .....		2,000
Second-mortgage 4½ per cent income bonds due 1975 .....	1,606,995	72,315
Preferred stock .....	747,833	37,392
Common stock .....	747,833	.....
Total capitalization ..	\$3,502,661	\$127,707

The equities of the holders of the present general mortgage 6 per cent bonds, due 1948, general creditors, preferred stock, and common stock are found to have no value; and no provision is made for their participation in the plan. The debt of \$75,468 due the Railroad Credit Corporation would fall in this wiped-out group.

Present holders of prior-lien 6 per cent bonds due 1948 would receive for each \$1,000, principal amount thereof, with all

interest coupons dated July 1, 1932, and subsequently attached, \$755, principal amount, in new second-mortgage income 4½ per cent bonds due 1975, \$377.50, par amount, of new preferred stock, and \$377.50, par amount, of new common stock. For each such interest coupon not presented for exchange with the bond, the amounts received will be reduced by \$15 in new second-mortgage income bonds, \$7.50 in new preferred stock, and \$7.50 in new common stock.

The \$211,330 claim of the United States Treasury Department, based on a \$151,500 loan and \$59,830 in interest due, would be satisfied with a \$100,000 payment in cash, \$111,330 in the new second mortgage 4½ per cent income bonds. The Reconstruction Finance Corporation would be treated as if the collateral it holds on a \$185,000 note were outstanding. That collateral consists of \$515,000 of the prior-lien 6 per cent bonds on which interest of \$133,900 has accrued since March 1, 1936, when interest was last paid on the note held by R. F. C. Thus for purposes of the allocation the government lending agency becomes the holder of prior lien bonds and unpaid interest coupons thereon in the aggregate amount of \$648,900; and like other holders of such bonds, mentioned above, it would get for each \$1,000 of principal and interest \$755 of the new second-mortgage 4½ per cent income bonds, \$377.50 of the new preferred stock and \$377.50 of the new common.

The trustees certificates of indebtedness are proposed to be paid in cash from the proceeds of a new R. F. C. loan if such loan is approved by the I. C. C. and authorized by R. F. C.

ATCHISON, TOPEKA & SANTA FE.—*Bonds of Pecos & Northern Texas.*—The Pecos & Northern Texas has applied to the Interstate Commerce Commission for authority to extend to January 1, 1958, the maturity date of its first mortgage bonds which became due on May 1, 1937. The bonds are owned by the Santa Fe.

ATLANTIC COAST LINE.—*Equipment Trust Certificates.*—Drexel & Co. and Lawrence M. Marks & Co. offered for public sale on September 5 an \$8,150,000 issue of Atlantic Coast Line 2 per cent equipment trust certificates, Series G. The sale followed an award by the railroad of the issue to the two firms on a bid of 100.326 after competitive bidding. Interest cost to the company amounted to 1.93. Certificates are being re-offered at prices from 0.45 to 2.4. Other particulars concerning the issue were reported in the *Railway Age* of August 31, page 323.

BOSTON & MAINE.—*Bonds of Vermont Valley.*—The Vermont Valley has applied to the Interstate Commerce Commission for authority to issue \$1,500,000 of first mortgage, sinking fund, four per cent bonds. The proceeds of the issue, which the applicant proposes to sell at par to the Equitable Life Assurance Society, will be used to retire a like amount of 30-year, first mortgage, 4½ per cent, gold bonds, dated October 1, 1910, and maturing October 1, 1940.

CARLTON & COAST.—*Abandonment.*—The Interstate Commerce Commission, Division

4, has authorized this road to abandon its entire line extending from Carlton, Ore., to Cody, 20.4 miles.

CENTRAL OF NEW JERSEY.—*L. & S. lease.*—Trustees of this road have been granted an extension of the date on which they must decide whether to continue or disaffirm the present Central lease of the Lehigh & Susquehanna from the Lehigh Coal & Navigation Co., from September 11 to May 1, 1941, by the federal district court at Newark, N. J. Trustees told the court that necessary traffic analyses and cost studies of operation over the leased trackage would not be completed until April 1. Rental for the L. & S. has been in dispute for some time, the Central threatening to disaffirm the lease and the L. C. & N. (which operates the Lehigh & New England) declaring that it might operate the L. & S. directly.

CHESAPEAKE & OHIO.—*Trackage Rights.*—This road has applied to the Interstate Commerce Commission for authority to operate excursion trains over a line of the Virginia Public Service Company between Phoebus, Va., and Buckroe Beach, 2.3 miles.

DULUTH, MISSABE & IRON RANGE.—*Equipment Trust Certificates.*—This road has applied to the Interstate Commerce Commission for authority to assume liability for \$1,500,000 of 1½ per cent equipment trust certificates to finance in part the acquisition of rolling stock to cost \$2,089,200. The applicant proposes to invite competitive bids for the issue which would mature \$150,000 on each October 1 from 1941 to 1950, inclusive.

LOUISIANA & ARKANSAS.—*R. F. C. Loan.*—In order to provide an alternative method of refinancing this road's \$350,000 secured note to the First National Bank of Chicago, the Interstate Commerce Commission, Division 4, has modified its decision of August 6, approving a \$1,000,000 R. F. C. loan to the L. & A., so as to approve "in lieu of the loan of not to exceed \$1,000,000 therein approved, a loan of not to exceed \$1,000,000 by the Finance Corporation to the applicant and the guaranty by the Finance Corporation, in its discretion, of a note of the applicant in the principal amount of \$350,000 to be given in evidence of a like principal amount of such loan of not to exceed \$1,000,000."

NEW YORK, NEW HAVEN & HARTFORD.—*Abandonment.*—This road has applied to the Interstate Commerce Commission for authority to abandon a 2.33-mile section of the Hartford & Connecticut between Canaan, Ct., and East Canaan.

NORFOLK & WESTERN-VIRGINIAN.—*Control of Norfolk Terminal.*—These two roads have applied to the Interstate Commerce Commission for authority to take over the stock whereby the Norfolk Southern has held a one-third interest in the Norfolk Terminal Railway Company. Each of the joint applicants has also held one-third of the Terminal Company's stock which has been subject to a stock-trust agreement providing that the stock of any defaulting member of the triumvirate would pass to the others. With the Norfolk



Southern in receivership, the application is designed to carry out the terms of that agreement. No financial consideration is involved.

**PIONEER & FAYETTE.**—*Equipment Trust Certificates.*—By two related decisions the Interstate Commerce Commission, Division 4, has approved arrangements whereby this road will refund a \$2,000 equipment trust certificate which is held by the Reconstruction Finance Corporation and which matured December 1, 1939. The transaction will involve sale to the R. F. C. at par and accrued interest of a refunding certificate with a maturity date of December 1, 1941.

**SOUTHERN PACIFIC.**—*Notes of United Railways Company.*—Acting in accordance with the applicant's desire to withdraw, the Interstate Commerce Commission, Division 4, has dismissed the United's application for authority to issue five per cent promissory notes in the amounts of \$450,000 and \$573,750, secured by a first mortgage on its railroad property.

**SOUTHERN PACIFIC.**—*Equipment Trust Certificates.*—This road has applied to the Interstate Commerce Commission for authority to issue \$11,820,000 of 2½ per cent equipment trust certificates, Series Q, which it proposes to sell at 96.777 to a syndicate headed by Halsey, Stuart & Company, Inc. The certificates would mature \$788,000 on October 1 of each year from 1941 to 1955, inclusive.

**SPRINGFIELD SOUTHERN.**—*Incorporation.*—Incorporation papers for the Springfield Southern Railroad Company were filed at Springfield, Ill., on September 9. The new company will acquire and operate the Springfield-Curran part of the Chicago, Springfield & St. Louis, which serves coal mines, and will be controlled by Summer & Co., Columbus, Ohio.

**TEXAS MEXICAN.**—*Operation.*—This road has been authorized by the Interstate Commerce Commission to operate over 19 miles of track now being constructed for the United States Government for the purpose of providing rail service in connection with construction work on the Naval Air Station being built at Flour Bluff, about 12.5 miles outside Corpus Christi, Tex. The decision cites evidence to the effect that "highways between Corpus Christi and the Naval Air Station are inadequate to sustain continuous truck transportation," and that it would be "impracticable to handle by truck all the traffic which will be required for the construction."

**WICHITA NORTHWESTERN.**—*Abandonment.*—This road has applied to the Interstate Commerce Commission to abandon its entire 99.47-mile line, which includes a 74.49-mile main line from Pratt, Kan., to Vaughn, and two branches totaling 24.98 miles.

#### Average Prices of Stocks and Bonds

	Sept. 10	Last week	Last year
Average price of 20 representative railway stocks..	29.27	29.60	33.54
Average price of 20 representative railway bonds..	58.63	58.59	59.83

## Railway Officers

### EXECUTIVES

**D. L. Keiser** has been elected vice-president-maintenance of the Texas Mexican, a newly created position, with headquarters at Laredo, Tex.

**M. Angulo G.** has been elected president of the Kansas City, Mexico & Orient (in Mexico), with headquarters at Mexico City, D. F., succeeding **L. R. Hoard**, and **Juan F. Trevino**, commercial agent at Chihuahua, Chi., has been elected vice-president and general manager, with the same headquarters, replacing **H. F. Jones**.

**A. C. Shields**, vice-president and general manager of the Pittsburg & Shawmut, has been elected first vice-president and general manager, with headquarters as before at Kittanning, Pa. Mr. Shields will take over the duties of **R. M. Shepherd**, who has resigned as president, effective August 21.

**R. E. Kendrick**, assistant to president and secretary of the Napierville Junction, with headquarters at Montreal, Que., was elected vice-president of the company at a meeting of the board of directors on September 4. He will also continue his office as secretary. A sketch of Mr. Kendrick's railway career was published in the *Railway Age* of May 25, page 958.

**J. M. Guild**, whose promotion to assistant to the vice-president of operations of the Union Pacific, with headquarters at Omaha, Neb., and with jurisdiction over safety matters, was announced in the *Rail-*

1935, he was promoted to assistant superintendent of the Colorado division, with headquarters at Denver, and in June, 1936, he was advanced to superintendent of that division, with the same headquarters. In April, 1940, Mr. Guild was appointed special representative to the assistant vice-president of operations at Omaha, the position he held until his recent promotion, which was effective September 1.

**Russell D. Gray**, general freight agent-solicitation of the New York, Ontario & Western, with headquarters at New York, has been appointed special assistant to trustee. His duties will consist of supervision



Russell D. Gray

of all advertising, both freight and passenger and such public relations and personnel work as may be assigned him by the trustee. Mr. Gray was born on November 2, 1899, at Wichita, Kan., the son of the late Carl R. Gray, and was educated in the public schools of St. Louis, Mo., and St. Paul, Minn.; Portland Academy, Portland, Ore.; Gilman Country School, Philadelphia, Pa.; and Princeton University. He was with the United States Marine Corps in 1917-1918 and from 1921-1929 was captain commanding Battery F, 240th Coast Artillery, Maine National Guard. Mr. Gray entered railroad service on March 1, 1932, as traveling freight agent in the New England territory for the Western Maryland, and on August 15, 1933, was promoted to commercial freight agent for New York City and New England. On October 15, 1936, Mr. Gray became freight representative of the Pennsylvania, with headquarters at Boston, Mass., the position he held until his appointment as general freight agent-solicitation of the New York, Ontario & Western on December 1, 1938.

### OPERATING

**J. B. Nance** has been appointed superintendent of the Maryland & Pennsylvania, with headquarters at Baltimore, Md.

**J. M. Hanken** has been appointed superintendent of car service of the Illinois Terminal, with headquarters at St. Louis, Mo., a newly created position.

**R. F. Jeter**, trainmaster on the Alton at Bloomington, Ill., has been appointed trainmaster on the Baltimore & Ohio Chi-



J. M. Guild

way *Age* of September 7, was born in Omaha, and entered railway service in 1904 as a clerk on the Union Pacific at Omaha. He later served as secretary of the bureau of safety and general safety agent. In 1918, Mr. Guild was appointed assistant yardmaster at Rawlins, Wyo., and served at various points in that capacity and as night yardmaster, general yardmaster, safety agent on the Nebraska division and trainmaster at Grand Island, Neb., Cheyenne, Wyo., Salina, Kan., Ogden, Utah and Denver, Colo. In March,

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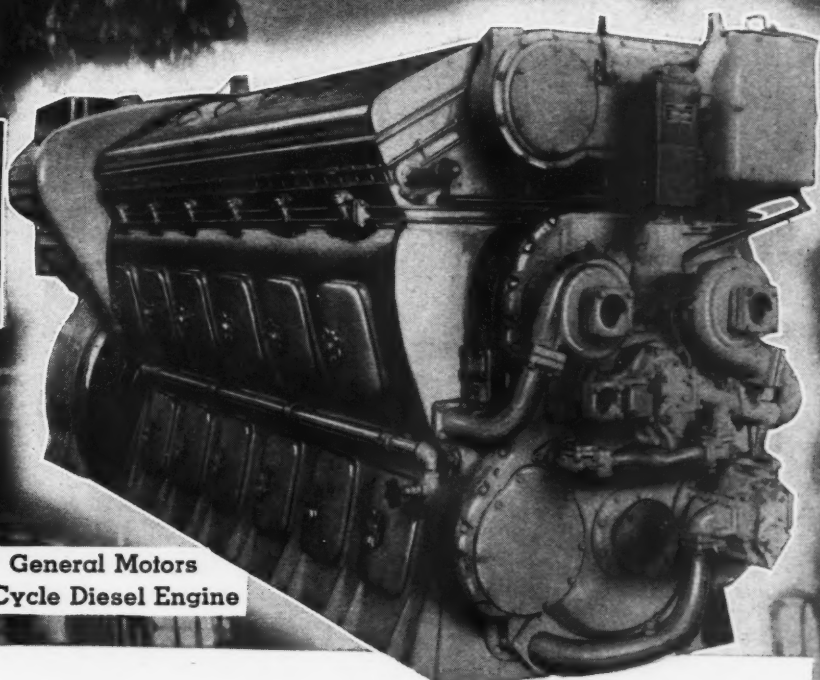
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**S**IX 3600 Hp. EMC Diesel passenger locomotives entered service on the Baltimore and Ohio—two in May and June, 1937, two in January, 1938, two in June, 1938. Up to June 30, 1940, these locomotives have operated 3,441,916 miles with an average availability of 95.5 per cent. Diesel locomotive No. 56 on the Capitol Limited, which operated every day for an entire year without missing a trip, has to its credit 515,485 miles with 99.3 per cent availability.

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cago Terminal, with headquarters at Chicago, succeeding **R. A. Barlow**, who has been appointed assistant trainmaster in charge of passenger train operation, with the same headquarters. **L. E. Thornton**, assistant trainmaster on the Alton, has been promoted to trainmaster at Bloomington, replacing Mr. Jeter.

**Jose Murguia** has been appointed assistant general manager of the Kansas City, Mexico & Orient (in Mexico), a newly created position, with headquarters at Ciudad Juarez, Chi.

**H. A. Hansen** has been appointed manager of the dining car and hotel department of the Union Pacific, with headquarters at Omaha, Neb., succeeding **E. C. Webster**.

**W. T. Quirk**, assistant to the general manager on the Coast lines of the Atchison, Topeka & Santa Fe, with headquarters at Los Angeles, Cal., retired on September 10 after 60 years of railroad service.

**J. C. Wallace**, assistant chief engineer of the New York, Chicago & St. Louis (Nickel Plate), with headquarters at Cleveland, Ohio, has been appointed assistant general superintendent, a newly created position, with the same headquarters.

**L. W. Green**, terminal trainmaster on the Atlantic Coast Line at Rocky Mount, N. C., has been appointed trainmaster of the Norfolk district, with headquarters at Tarboro, N. C., succeeding **H. A. Blankenship**, who retired on September 1, after more than 45 years of service.

**S. J. Fullerton**, assistant superintendent of sleeping and dining car services, Canadian National, with headquarters at Halifax, N. S., has been appointed superintendent of sleeping and dining car services, with jurisdiction over the Atlantic region, at Halifax. **W. A. McDonald**, assistant superintendent of sleeping and dining car services at Toronto, Ont., has been appointed superintendent of sleeping and dining car services at Toronto, with jurisdiction over the Ontario district and Grand Trunk Western region.

**William H. Dick**, whose retirement as assistant to the chief operating officer and acting general superintendent on the Chicago, Rock Island & Pacific, with headquarters at Kansas City, Mo., was announced in the *Railway Age* of September 7, was born at McLouth, Kan., on September 13, 1873, and entered railway service in 1890, as a yard clerk on the Atchison, Topeka & Santa Fe at Topeka, Kan. The following year he became a telegraph operator and served in that capacity on various divisions until 1898, when he was appointed extra dispatcher at La Junta, Colo. In May, 1901, he went with the Rock Island as extra dispatcher at Chickasha, Okla., being advanced to night chief dispatcher at Fort Worth, Tex., in 1907, and to chief dispatcher in May, 1912. He was further promoted to trainmaster on the Indian Territory division in June, 1914, later serving in the same capacity on the Pan Handle, Oklahoma, St. Louis-Kansas City and Kansas divisions. On October 15, 1929, he was appointed super-

intendent of the Nebraska-Colorado division, with headquarters at Fairbury, Neb. Mr. Dick was advanced to general superintendent of the First district, with headquarters at Des Moines, Iowa, in July, 1936, and in June, 1939, he was promoted to assistant to the chief operating officer, with headquarters at Kansas City, the position he held until his retirement.

**Charles W. Rand** has been appointed superintendent car service of the Canadian National, with headquarters at Moncton, N. B., succeeding **Alfred P. Gorbell**, who has retired after 50 years of service. Mr. Rand was born at Moncton on May 12, 1887, and entered the service of the Canadian National as a clerk in the general manager's office at Moncton on October 1, 1906. In July, 1915, he was appointed assistant chief clerk and on March 1, 1923, chief clerk. He served in active military service overseas from May 1, 1916, to November 22, 1918.

Mr. Gorbell was born in Halifax, N. S., on August 24, 1875, and commenced his railway career as a messenger in the engineering department of the Canadian National at Moncton on June 1, 1890. In December, 1890, he became clerk in the car mileage office and in April, 1903, he was appointed chief clerk. In November, 1915, he became car service agent; in January, 1917, car accountant; and on October 1, 1920, superintendent of car service.

**Alex Rollins Brinkley**, whose appointment as district superintendent of the Atlantic Coast Line at Norfolk, Va., was announced in the *Railway Age* of August 10, was born on June 4, 1883, near Cypress Chapel, Va. Mr. Brinkley entered railroad service on August 1, 1897, in the maintenance of way department of the



Alex Rollins Brinkley

Norfolk & Western. In January, 1898, he entered the mechanical department of the Norfolk Southern, remaining there until February 1, 1900, when he entered the mechanical department of the Seaboard Air Line. On March 1, 1901, Mr. Brinkley went with the Atlantic Coast Line and served in the mechanical department until April 1, 1902, when he was transferred to the transportation department where he served as flagman until May 1, 1904, when he became day yardmaster. On May 1, 1910, he became night yardmaster on the Seaboard Air Line, returning to the At-

lantic Coast Line on October 1, 1910, as day yardmaster. On October 21, 1925, he became general yardmaster at Pinners Point and on June 1, 1927, became terminal trainmaster at Pinners Point, the position he held until his appointment as district superintendent, effective August 1.

**Clarence Leonard Bakke**, whose promotion to general superintendent on the Chicago, Rock Island & Pacific, with headquarters at El Reno, Okla., was announced in the *Railway Age* of September 7, was



Clarence Leonard Bakke

born at Mayville, N. D., on September 24, 1886, and attended North Dakota State Normal school. He entered railway service with the Chicago, Burlington & Quincy in April, 1910, in engine service. Later he was transferred to train service as a brakeman, being promoted to conductor in 1915. During the war Mr. Bakke served with the Fifteenth Engineers in France. Returning from army service, he was appointed yardmaster on the Burlington at Sterling, Ill., later being transferred to Chicago, where he was appointed assistant trainmaster in 1922. In February, 1925, he was further advanced to trainmaster of the Ottumwa division, serving in this capacity on various divisions until October 12, 1936, when he went with the Rock Island as terminal trainmaster at Peoria, Ill. On February 4, 1937, he was promoted to assistant superintendent of the Des Moines division, and on March 1, 1937, he was promoted to superintendent of that division. Mr. Bakke was transferred to the Missouri-Kansas division, with headquarters at Kansas City, Mo., in November, 1938.

## TRAFFIC

**R. T. McSweeney**, oriental traffic manager of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Chicago, has been appointed also assistant freight traffic manager.

**C. H. Chapman** has been appointed assistant general freight agent on the Green Bay & Western, with headquarters at Green Bay, Wis., succeeding **M. M. Terrill**, whose death on July 13 was announced in the *Railway Age* of August 3.

**W. H. Francis**, assistant general freight agent on the Southern Pacific at Portland, Ore., has been appointed gen-





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*Air Furnace*

eral agent on the St. Louis Southwestern, at El Paso, Tex., succeeding **W. C. Barnes**, deceased.

**R. E. McComas**, commercial agent on the Chicago & Eastern Illinois at Danville, Ill., has been promoted to general agent at Tulsa, Okla., succeeding **Thomas L. Faulkner**, whose death on June 15 was announced in the *Railway Age* of July 13.

**Neal D. Keller**, district passenger agent on the Great Northern at Seattle, Wash., has been promoted to assistant general passenger agent, with the same headquarters, succeeding **Claude W. Meldrum**, whose death on August 28 was announced in the *Railway Age* of September 7.

**Frank P. Wagner**, whose promotion to traffic manager on the Chicago Great Western, with headquarters at Chicago, was announced in the *Railway Age* of Au-



Frank P. Wagner

gust 24, was born at Economy, Ind., on September 15, 1901, and entered railway service in March, 1920, with the Central Passenger Association at Chicago. A year later he went with the Chicago Great Western at Chicago as a clerk and rate clerk. In November, 1922, he was promoted to ticket agent at Rochester, Minn., and in January, 1924, he was transferred to St. Paul, Minn. Mr. Wagner was promoted to district passenger agent at New York in January, 1925; appointed city passenger agent at Kansas City, Mo., in January, 1929, and city freight agent at that point in March, 1932. Seven months later, he was advanced to assistant general agent at Chicago, and in January, 1935, he was promoted to general agent at Cincinnati, Ohio. Mr. Wagner was transferred to Los Angeles, Cal., in October, 1936, where he was located at the time of his recent promotion.

**J. B. Sharpton**, assistant to freight traffic manager of the Atlantic Coast Line, with headquarters at Wilmington, N. C., has been appointed assistant to general traffic manager. **S. P. Wigg** has been appointed assistant to general freight traffic manager.

**F. H. Dowling**, general agent for the Missouri-Kansas-Texas at Minneapolis, Minn., has been promoted to general freight agent, a newly created position, with head-

quarters at Kansas City, Mo., and **C. S. Poston**, traveling freight and passenger agent at Kansas City, has been advanced to general agent at Minneapolis, relieving Mr. Dowling.

**C. L. Hinnant**, **L. L. Doss** and **James L. Wells**, general freight agents of the Atlantic Coast Line, with headquarters at Wilmington, N. C., have been appointed assistant freight traffic managers. **E. L. Watkins**, **E. C. Hicks, Jr.**, and **G. F. Potter**, assistant general freight agents at Wilmington, have been appointed general freight agents. **T. K. Lynch**, assistant to general freight agent at Wilmington, has been appointed assistant general freight agent. **R. B. Warner** has been appointed assistant general freight agent and **J. G. Middleton** has been appointed assistant to general freight agent.

### ENGINEERING AND SIGNALING

**C. B. Porter**, resident engineer on the Chesapeake & Ohio, with headquarters at Huntington, W. Va., has been promoted to assistant division engineer of the Huntington division with the same headquarters, to succeed **R. R. Burchett**, whose promotion to division engineer of the Chicago division, with headquarters at Peru, Ind., was announced in the *Railway Age* of July 27.

**C. R. Wright**, district engineer of the Lake Erie & Western district of the New York, Chicago & St. Louis (Nickel Plate), with headquarters at Frankfort, Ind., has been promoted to assistant chief engineer, with headquarters at Cleveland, Ohio, succeeding **J. C. Wallace**, whose appointment as assistant general superintendent at Cleveland, is announced elsewhere in these columns.

### OBITUARY

**P. E. Watson**, general freight and passenger agent on the Missouri Pacific at Kansas City, Mo., died in that city on August 29. Mr. Watson had been in ill health for several weeks.

**Robert Faries**, assistant chief engineer of maintenance of the Pennsylvania, with headquarters at Philadelphia, Pa., died of a heart attack on September 8, at his home in St. Davids, Pa., at the age of 59 years.

**C. S. Gzowski**, chief engineer of construction of the Canadian National, with headquarters at Montreal, Que., died in that city on September 7 after a short illness, at the age of 64. Mr. Gzowski was born on May 1, 1876, at Toronto, Ont., and was educated at Bishop Ridley's College and the School of Practical Science of the University of Toronto. During the summers of 1895, 1896 and 1897 he worked in the engineering department of various railroads and from 1897 to 1905 was engaged in railway location and construction for the Canadian Pacific and other roads in Ontario and the western provinces. From 1905 to 1906 he was a partner of Loss & Macdonnell, builders of the Nicola Kamloops and Similkameen branch of the Canadian Pacific from Spence's Bridge, B. C. In 1906 he formed a partnership under the

name of Macdonnell, Gzowski & Co., Vancouver, B. C., in charge of a considerable mileage of railway construction in British Columbia, Montana, Idaho and Washington; among these, the spiral tunnels of the Canadian Pacific at Field, B. C. He was also engaged in municipal improvement work. In 1914 the partnership was dissolved and Mr. Gzowski engaged in private engineering practice until 1916, when he was appointed valuating engineer for the Royal Commission of Enquiry into Railways and Transportation. In April, 1917, he again entered private practice and on December 1, 1917, he was engaged by the directors of the Canadian Northern to assist in the arbitration of the value of their stock. From January, 1918, to April, 1919, he engaged in special work for the vice-president of the Canadian Northern and on the latter date became special engineer to the vice-president of operation, maintenance and construction, Canadian National. From October, 1920, to March, 1923, he served as assistant to vice-president, construction, same road, and became chief engineer of construction in March, 1923.

**Richmond Dean**, who retired on November 2, 1931, as senior vice-president of the Pullman Company and president of the Pullman Railroad, died on September 5 at the Highland Park hospital, Highland Park, Ill. Mr. Dean was born at St. Louis, Mo., on November 2, 1862, and in 1875, became connected with the Boatmen's bank at St. Louis, subsequently going with the Missouri Pacific as a clerk at St. Louis. He remained with the Missouri Pacific until 1882, when he joined the Pullman Company as a clerk at St. Louis, being subsequently appointed assistant superintendent at that point. In 1888, Mr. Dean was sent to Chicago as secretary to the general superintendent, later being made assistant superintendent. He left this company in 1894 to become assistant to the vice-president of the Missouri-Kansas-Texas at St. Louis, but returned to the



Richmond Dean

Pullman Company in 1899 as assistant to the vice-president. He was promoted to general manager of the Pullman Company and president of the Pullman Railroad at Chicago in 1905, and in 1915 he was elected vice-president of the Pullman Company, which position he held until his retirement.